

1946

1946-47 Seattle College Bulletin of Information

Seattle College

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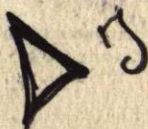
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BULLETIN OF INFORMATION

SEATTLE COLLEGE

For the Academic Year

1946-1947



JAN 6 1947
JAN 6 1947

SEATTLE COLLEGE

Seattle 22, Washington

VETERANS SEATTLE COLLEGE

On-campus living quarters are available at reasonable rates to a certain number of unmarried veterans.

Boarding is provided by Seattle College Cafeteria.

Seattle College, in conjunction with the Veterans' Administration, conducts the Seattle College Guidance Center. Personalized direction is the business of this department.

A.M.D.G.

Bulletin of

SEATTLE COLLEGE

for the

COLLEGE OF ARTS AND SCIENCES

SCHOOL OF COMMERCE AND FINANCE

SCHOOL OF EDUCATION

SCHOOL OF ENGINEERING

SCHOOL OF NURSING

GRADUATE SCHOOL OF ARTS AND SCIENCES

The Academic Year

1946 - 47

SEATTLE COLLEGE,

Seattle 22, Washington

-1947

JANUARY

S	M	T	W	T	F	S
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MAY

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SEPTEMBER

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FEBRUARY

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JUNE

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OCTOBER

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MARCH

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JULY

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NOVEMBER

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AUGUST

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DECEMBER

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1948

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CONTENTS

	<i>Page</i>
ACADEMIC CALENDAR	4
OFFICERS OF ADMINISTRATION.....	5
FACULTY	6
GENERAL INFORMATION.....	12
Location, History	12
Aim of Jesuit Education.....	12
Accreditation	13
Admission	13
Registration	15
Administrative Procedure	15
Scholarships	19
Form of Bequest.....	20
Tuition and Fees.....	22
PROGRAMS OF STUDY.....	24
College of Arts and Sciences.....	24
School of Commerce and Finance.....	31
School of Education.....	33
School of Engineering.....	36
School of Nursing.....	41
Night School.....	45
Summer Session	45
Graduate School	46
COURSES OF INSTRUCTION.....	48
GRADUATES AND AWARDS OF 1946.....	73
INDEX	74

ACADEMIC CALENDAR

1947 - 1948

WINTER QUARTER 1947

Classes Resume.....	January 2
Mid-Quarter Examinations.....	February 13-14
Last day to withdraw officially and receive a "W" without a grade.....	February 28
Final Quarter Examinations	March 13-14

SPRING QUARTER 1947

Classes Resume.....	March 17
Annual Retreat	March 20-21
Good Friday—No Classes.....	April 4
Classes Resume.....	April 8
Mid-Quarter Examinations.....	April 23-25
Ascension Thursday—No Classes	May 15
Last day to withdraw officially and receive a "W" without a grade.....	May 16
Baccalaureate Mass.....	May 25
Final Quarter Examinations.....	May 28-29
Commencement	May 29

SUMMER QUARTER 1947

Classes Resume	June 16
Comprehensive and Language Examinations for Master's Degree.....	June 20
Independence Day—No Classes.....	July 4
Mid-Quarter Examinations.....	July 16-18
Last day to withdraw officially and receive a "W" without a grade.....	August 8
Assumption—No Classes	August 15
Comprehensive and Language Examinations for Master's Degree.....	August 19
Final Examinations	August 21-22

FALL QUARTER 1947

Classes Resume	October 1
Mass of the Holy Ghost.....	October 15
Mid-Quarter Examinations.....	November 3-4
Annual Retreat.....	November 5, 6, 7
Thanksgiving Vacation.....	November 27-28
Last day to withdraw officially and receive a "W" without a grade.....	December 5
Immaculate Conception	December 8
Final Quarter Examinations.....	December 18-19

WINTER QUARTER 1948

Classes Resume.....	January 5
Mid-Quarter Examinations.....	February 12-13
Last day to withdraw officially and receive a "W" without a grade.....	February 27
Final Examinations.....	March 11-12

SEATTLE COLLEGE

OFFICERS OF ADMINISTRATION

VERY REV. HAROLD O. SMALL, S.J., Ph.D., *President of the College*

REV. A. B. CORRIGAN, S.J., M.A., *Dean of Studies*

REV. ARTHUR C. EARL, S.J., M.A., *Treasurer*

REV. ARTHUR S. WHARTON, S.J., M.A., *Librarian*

MRS. RUTH BRAND JOHNSON, B.S., *Registrar*

EXECUTIVE BOARD

REV. HAROLD O. SMALL, S.J., Ph.D., *Chairman*

REV. GERALD R. BEEZER, S.J., Ph.D.

REV. ARTHUR C. EARL, S.J., M.A.

REV. A. B. CORRIGAN, S.J., M.A.

REV. JAMES B. MCGOLDRICK, S.J., Ph.D.

MR. STANLEY J. PADDEN, LL.B., *Legal Adviser*

MR. CHARLES P. MORIARTY, LL.B., *Legal Adviser*

COMMITTEES*

Committee on Admissions

Fr. Corrigan, Chairman; Fr. Beezer, Mrs. Ruth Brand Johnson, Fr. Carmody, Fr. McNulty, Fr. Reidy, Dr. Werby.

Committee on Degrees

Fr. Corrigan, Chairman; Fr. Beezer, Fr. Conway, Fr. McGoldrick, Fr. Carmody, Fr. McNulty, Dr. Volpe.

Committee on Programs of Study and Catalogue

The Dean together with Heads of Departments and Directors of Schools.

Graduate Council

Fr. Small, Chairman; Fr. Beezer, Fr. Conway, Fr. McGarrigle, Fr. McGoldrick.

Committee on Religious Welfare

Fr. Perontau, Chairman; Fr. Lindekugel, Fr. McGarrigle, Fr. Wharton.

*The President is ex officio a member of every committee.

FACULTY 1946-1947

AKLIN, WALTER, B.M., *Piano* (1935)

Conservatory of Zurich, Switzerland, (Absolutorial) 1924 Piano
B.M. Seattle College 1942

ARMSTRONG, FRANCIS, *Violin* (1935)

BARNAUD, ERNESTE, M.A., *English* (1946)

A.B., Assumption College 1941, M.A., Boston University 1942

BEEZER, GERALD R., S.J., M.A., Ph.D., *Chemistry* (1935)

M.A. Gonzaga 1922, M.Sc. Gonzaga 1933, Ph.D. University of Washington 1946

BENNETT, G. BRYCE, B.S., *Civil Engineering* (1946)

B.S., University of Idaho 1943

BLANK, ALFRED F., *Machinist* (1946)

BOARDMAN, ELLA, *Voice* (1935)

CARMODY, ROBERT J., S.J., A.B., M.A., *English* (1933)

A.B. Gonzaga 1931, M.A. Gonzaga 1932; Candidate Ph.D., University of Washington

CLAES, LOLA M., B.S., *Home Economics* (1944)

B.S. Washington State College 1941

CONWAY, VINCENT M., S.J., A.B., M.A., *History* (1942)

A.B. Gonzaga 1934, M.A. Philosophy, Gonzaga 1935
M.A. History, Loyola University 1937

CORRIGAN, ANTHONY B., S.J., A.B., M.A., *Dean* (1944)

A.B. Gonzaga 1935, M.A. Gonzaga 1936

CRAWLEY, WALTER G., *English* (1946)

EARL, ARTHUR C., S.J., B.S., M.A., *Treasurer* (1944)

B.S., Creighton University 1928, M.A. Gonzaga 1937

FENTON, WILLARD M., *Asst. Dir. of Athletics* (1946)

A.B., Seattle College 1946

FLAJOLE, EDWARD S., S.J., A.B., M.A., *German* (1944)

A.B. Gonzaga 1928, M.A. Gonzaga 1929

GAFFNEY, LEO S., S.J., A.B., M.A. (Leave of Absence)

A.B., Gonzaga 1925, M.A., Gonzaga 1926

GALLEY, NEWTON W., *Commerce and Finance* (1946)

B.C.S. Racine's Western Institute 1941, C.P.A. Washington 1941

GILMORE, JAMES A., S.J., M.A., S.T.D., Ph.D.
A.B. Gonzaga 1917, M.A. Gonzaga 1918
Ph.D., S.T.D. Valkenburg 1925

GREENER, JOSEPH H., *Organ* (1943)

HARLAND, JAMES W., B.S., *Civil Engineering* (1946)
B.S. Iowa State College 1946

IVY, MARGARET A., B.S., *Zoology* (1946)
B.S. University of Washington 1936

JOHNSON, CARL E., Ph.B., *Commerce and Finance* (1946)
Ph.B. Gonzaga 1939

JOHNSON, RUTH BRAND, B.S., *Registrar* (1943)
B.S. Seattle College 1942

KANE, JOSEPH S., B.S., M.A., J.D., *Commerce and Finance* (1945)
B.S. New York University
M.A. Economics, New York University 1938
J.D. New York University 1937

KINERK, HARRY E., B.S., M.S., *Physics* (1942)
B.S., in E.E. Santa Clara 1934
M.S. University of Washington 1940

KOHL, HENRY H., S.J., A.B., M.A. (Leave of Absence)
A.B., Gonzaga 1935, M.A., Gonzaga 1936

LAMOTTA, JULIUS, S.J., A.B., M.A., *Language* (1941)
A.B., Gonzaga 1915, M.A., Gonzaga 1916

LEONARD, MARIE S., A.B., M.A., *Dean of Women* (1937)
A.B., Seattle College 1937, M.A., Seattle College 1938

LINDEKUGEL, FRANCIS J., S.J., A.B., M.A., *Religion* (1946)
A.B. Gonzaga 1937, M.A. Philosophy, Gonzaga 1938

LOGAN, FRANCIS, S.J., A.B., M.A., *Physical Education* (1944)
A.B. Gonzaga 1925, M.A. Gonzaga 1926

LONE, WILLIAM, A.B., *Mathematics* (1946)
A.B. Duke University 1942

LUGER, PAUL P., S.J., M.A., M.S., *Physics* (1946)
M.A. Gonzaga 1936, M.S. Fordham University 1946

MARSHALL, CLAIR, S.J., A.B., M.A., *Chemistry* (1933)
A.B., Gonzaga 1932, M.A., Gonzaga 1933

- McGARRIGLE, FRANCIS, S.J., M.A., Ph.D., S.T.D., Mag. Ag., *Philosophy* (1937)
M.A., Gonzaga 1914, Ph.D., S.T.D., Volkenburg, Holland, 1923
Mag. Ag. Gregorian 1925
- McGOLDRICK, JAMES B., S.J., A.B., M.A., S.T.D., Ph.D., *Education* (1931)
A.B., Gonzaga 1923, M.A., Gonzaga 1924, S.T.D., Gregorian University 1931
Ph. D. University of Washington 1935
- McGUIGAN, JAMES T., S.J., A.B., M.A., *English and Philosophy* (1946)
A.B. Gonzaga 1929, M.A. Gonzaga 1930
- McKILLOP, MARY, B.S., *Bacteriology* (1945)
B.S. Seattle College 1943
- McNULTY, EDMUND B., S.J., A.B., M.S., *Engineering* (1944)
A.B., Gonzaga 1931, M.S., Mathematics, Gonzaga 1933
M.S., Engineering 1944 Minnesota
- MERRELL, CREIGHTON, *Aviation* (1940)
Aero-Engineer., Certificated Aviation Instructor
- NICHOLS, RAYMOND, S.J., A.B., M.A., Ph.D., *History* (1930)
A.B. Gonzaga 1913, M.A., Gonzaga 1922, Ph.D. Louvain 1928
- PHILLIPS, RONALD, *Clarinet* (1940)
- PERONTEAU, HOWARD F., S.J., A.B., M.A., Ph.D., *Sociology* (1931)
A.B. Gonzaga 1921, M.A. Gonzaga 1922, Ph.D. Gregorian U 1935
- REIDY, DANIEL J., S.J., B.A., M.A., Ph.D., *Philosophy* (1930)
B.A., Gonzaga University 1907, M.A., Gonzaga University 1908
Ph.D. Gregorian University, Rome, 1916
- SHERWIN, GEORGE O., M.D., *Anatomy, Bacteriology* (1943)
M.D., University of Berlin, 1923
M.D., University of New York, 1938
- SMALL, HAROLD O., S.J., A.B., M.A., Ph.D., *President* (1945)
A.B., Gonzaga 1929, M.A., Gonzaga 1930, M.A., Sociology, Fordham 1943
Ph.D. Sociology, Fordham, 1944
- SPENCER, EUNICE, A.B., *Asst. Librarian* (1945)
A.B., University of Washington 1916, A.B., Librarianship University of Washington 1944
- VIZETELLY, NAZLEH, R.N., *Dir. Nursing Education* (1944)
M.A., New York University 1946
- VOLPE, PAUL A., A.B., M.A., Ph.D., *Commerce and Finance* (1944)
A.B., University of British Columbia, 1939, M.A., Catholic University, 1941
Ph.D. Catholic University, 1943

WERBY, HELEN, B.S., M.S., Ph.D., *Biology* (1937)
Ph.D., University of Washington 1938

WEST, LOIS, B.S., *Dietetics* (1944)
B.S., University of Washington, 1942

WHARTON, ARTHUR S., S.J., A.B., M.A., *Librarian* (1940)
A.B., Librarianship, University of Washington, 1943, M.A., Gonzaga 1932

WRIGHT, KENNETH A., B.S., M.S., PH.D., *Chemistry* (1946)
University of Washington 1946

ZEPHIRIN, SISTER, R.N., B.S., *Dir. of Nurses, Providence Hospital* (1940)
B.S. in Nursing, Seattle College 1937

SCHOOL OF NURSING

ASSOCIATE FACULTY

ANGELA, SISTER, R.N., *Dir. of Nurses, St. Joseph Hospital, Bellingham, Wash*

EDWINA, SISTER M., R.N., *Dir. of Nurses, St. Anthony Hospital, Wenatchee, Wash.*
B.S. in Nursing Education, Catholic University of America

EVARD, SISTER MARY, R.N., *Dir. of Nurses, St. Joseph Hospital, Tacoma, Wash.*
B.S. in Nursing Education, Catholic University of America, 1936

GIACOMINA, SISTER, R.N., *Dir. of Nurses, Columbus Hospital, Seattle*
B.S., Loyola University, 1942

GREGORY, SISTER MARY, R.N., *Dir. of Nurses, St. Joseph Hospital, Victoria, B. C.*
B.S., College of St. Theresa, Winona

MONICA, SISTER, R.N., *Dir. of Nurses, St. Elizabeth Hospital, Yakima*
B.S., University of Portland

NELSON, GRACE, R.N., *Dir. of Nurses, Virginia Mason Hospital, Seattle*
B.S. in Nursing, Seattle College, 1943

RUTH MARIE, SISTER, R.N., *Dir. of Nurses, Providence Hospital, Everett, Wash.*
B.S. in Nursing, Seattle College, 1943

INSTRUCTORS IN NURSING

- PROBACH, KATHERINE, R.N., *Asst. Dir. in charge of educational program. Instructor in Professional Adjustments II.* (1946)
B.S. in Nursing, Seattle College, 1945
- LEAVITT, HELEN, R.N., *Asst. Dir. in charge of clinical program* (1946)
B.S. in Nursing, Seattle College, 1945
Candidate M.S. in Nursing Education, Catholic U. of America, Washington, D. C.
- HEINEMANN, EDITH, R.N., *Instructor in Medical and Surgical Nursing* (1945)
B.S. in Nursing, Seattle College, 1945
- KINERK, MARY JANE KELLY, R.N., *Instructor in Operating Room Technique* (1946)
B.S. in Nursing, Seattle College, 1945
- NESS, DENYCE, R.N., *Instructor in Pediatric Nursing* (1946)
B.S. in Nursing, Seattle College, 1944
- HUTTULA, ELIZABETH, R.N., *Instructor in Orthopedic Nursing* (1946)
- DAHLSTROM, ADELINE, R.N., *Instructor in Elementary Nursing* (1947)
B.S. in Nursing, Seattle College, 1943
- DALY, MAE, R.N., *Instructor in Obstetrical Nursing* (1947)
B.S. in Nursing, Seattle College, 1945
- MACDONALD, ISABEL, R.N., *Instructor in Communicable Disease Nursing* (1947)

LECTURERS IN NURSING

- BERENS, S. N., M.D., *Neurology* (1937)
M.D., Creighton University, 1928
- BOWERS, J. M., M.D., *Endocrinology* (1946)
M.D., University of Michigan, 1925
- BRUENNER, B. F., M.D., *Dermatology* (1933)
M.D., University of Minnesota, 1929
- CALLAHAN, JOHN, M.D., *Orthopedics* (1947)
M.D., McGill University, 1942
- CARROLL, G. S., M.D., *Gynecology* (1946)
M.D., Creighton University, 1931

- CLANCY, JOHN, M.D., *Obstetrics* (1946)
M.D., Jefferson Medical School, 1936
- CODDLING, JOHN, M.D., *Obstetrics* (1946)
M.D., University of Oregon, 1942
- COLLINS, JOHN D., M.D., *Respiratory* (1946)
M.D., Northwestern University, 1938
- DODDS, G. A., M.D., *Anesthesia* (1947)
M.D., Northwestern University, 1936
- DORLAND, E. G., M.D., *Ear, Nose, Throat* (1946)
M.D., Northwestern University, 1937
- FINE, C. S., M.D., *Introduction to Medical Science* (1942)
M.D., University of Toronto, 1937
- FRANCIS, B. F., M.D., *Tuberculosis* (1942)
M.D., Washington University, 1926
- HOLLOWAY, J. K., M.D., *Gastro-Intestinal Disorders* (1946)
M.D., University of Pennsylvania, 1920
- MCDERMOTT, J. F., M.D., *Cardiovascular Disorders* (1946)
M.D., Creighton University, 1941
- MEYERS, HENRY, M.D., *Gynecology* (1947)
M.D., Marquette University, 1943
- MUELLER, H. D., M.D., *Materia Medica and Obstetrics* (1945)
M.D., Creighton University, 1943
- MURPHY, N. W., M.D., *Pediatrics* (1947)
M.D., University of Colorado, 1926
- NARODICK, P. H., M.D., *Tuberculosis* (1941)
M.D., University of Illinois, 1934
- NEWSOM, BRYAN, M.D., *Acute Communicable Diseases* (1934)
M.D., Northwestern University, 1930
- OSTROM, BRADFORD L., M.D., *Acute Communicable Diseases* (1946)
M.D., University of Southern California, 1935
- PEACOCK, A. H., M.D., *Urology* (1937)
M.D., University of Pennsylvania, 1903
- SCHIACK, J. M., M.D., *Eye* (1946)
M.D., University of Oregon, 1933
- SPEIR, E. B., M.D., *Medical and Surgical Nursing* (1946)
M.D., University of Kansas, 1933
- THOMAS, J. S., M.D., *Veneral Diseases* (1936)
M.D., University of Oregon, 1907

GENERAL INFORMATION

Location

Seattle College is located at 900 Broadway near the civic center of the city of Seattle, Washington. Seattle is the gateway to Alaska and the Orient, and is the cultural, industrial and recreational metropolis of the Pacific Northwest.

History

Seattle College was founded in 1892, and received its charter from the State of Washington in 1898 under the corporate title of "Seattle College," with power to confer such academic degrees and honors as are conferred by similar institutions and colleges of learning in the United States.

The origins of Seattle College date back to the arrival in Seattle of the Rev. Victor Garrand, S. J., and the Rev. Adrian Sweere, S. J., on September 27, 1891, with the intention of founding an institution of higher learning. They first established themselves in Saint Francis' Hall, located on Sixth and Spring Streets, which they used for a church and school. The building was rented from the Rev. F. X. Prefontaine until the fathers were able to provide themselves with a permanent location in the city. The block on the corner of Broadway and Madison was secured in 1892, and in 1893 was laid the cornerstone of the building which was to serve both as a college and as the first Immaculate Conception Church.

With the advent of Rev. Conrad Brusten, S. J., and Rev. Patrick Mahony, S. J., in 1894, students were enrolled in the "Academic" course of studies. The years that followed were years of struggle. In the midst of pioneer conditions the college had been founded, and thus it was not until the year 1900 that the collegiate course was begun with the class of "Humanities." The next year was announced the inauguration of graduate studies: "For the degree of Master of Arts it will be required that the applicant shall have continued his studies in this course (classical) a Fifth Year or practised a learned profession for two years."* At the request of former students a special night course in philosophy was added to the curriculum in 1907.

With the almost unprecedented progress of the city in population during the succeeding years, the institution felt the need of expansion. This was realized in 1918, through the munificence of Mr. and Mrs. Thomas C. McHugh. A seven acre campus along Interlaken Boulevard and two buildings, admirably suited to scholastic needs, were presented to the college. The new site was ready for the faculty and students at the opening of the fall season of 1919.

In the fall of 1931 it was decided to separate the college from the high school. The high school remained at Interlaken Boulevard and the college returned to Broadway and Madison.

A school of nursing education was added to the faculties in 1933, when the Providence Hospital School of Nursing was affiliated with the college. The rapid growth of the student body during the next ten years under Rev. Francis E. Corkery, S. J., president, and the Rev. James B. McGoldrick, S. J., dean, was further accelerated in 1941, by the construction of an imposing liberal arts building on the original campus. A school of engineering was organized in 1941, and a building adjoining the campus on E. Spring and Tenth was acquired the following year to provide the requisite laboratory facilities. This expansion and growth has made Seattle College the largest Catholic college on the Pacific Coast.

The Aim of Jesuit Education

The aim of the Jesuit educational system at Seattle College is fixed by the Christian and specifically Catholic concept of the complete nature and final destiny of man. Seattle College, therefore, directs its efforts to forming as well

*Seattle College Bulletin, 1901, p. 9.

as informing man whole and entire, soul united to body, mind with heart, in the "aggregate of human life, physical and spiritual, intellectual and mortal, individual, domestic and social." To educate an unchanging nature in the midst of a changing world, the college strives both to present to young Americans the complex problems of modern life and to assist them to solve these problems by the aid of eternal principles.

Realizing that neither age nor modernity is the final touchstone of truth, the Jesuit fathers and lay faculty of Seattle College have as their objective to educate youth by the light of the tested wisdom of the past, in the academic and practical concerns of the present, in order to form for the future the true and finished man of character and culture.

ACCREDITATION

Seattle College is a member of, or approved by,

The Jesuit Educational Association

The Catholic Educational Association

The Northwest Association of Colleges

By virtue of this membership credits are recognized by the North Central Association of Colleges, the Association of the Middle States and Maryland, the New England Association and the Southern Association.

The Washington State Board of Education

The American Medical Association

The American Society of Clinical Pathologists

The Association of American Colleges

American Council of Education

ADMISSION

Seattle College divides the scholastic year into four equal periods which are called the Fall, Winter, Spring and Summer Quarters. The Summer Quarter is not a necessary part of the school year but it will continue in the post-war period to be a full quarter in order that veterans may accelerate their college education. The four year curriculum of studies can be completed in three years by attendance at the summer sessions. Students may enter college at the beginning of any one of the four Quarters.

Application

Application for admission shall be made to the Registrar of Seattle College, 900 Broadway, Seattle 22, Washington. This application accompanied by proper credentials shall be filed with the registrar at least two weeks in advance of the date of registration. Credentials which are accepted toward admission become the property of Seattle College and are filed permanently with the registrar.

Methods of Admission

1. High School Graduates

Admission is granted on presentation of a certificate of graduation from an accredited high school, with the recommendation of the principal.

A high school is accredited if it is on the approved list of the Northwest Accrediting Association or other recognized state or regional standardizing body.

The certificate of graduation should include 16 units in acceptable subjects. A unit represents a year of study in any subject in a secondary school, covering an academic year of at least 36 weeks, five periods per week, each period being at least 45 minutes.

The following units are required of all registrants:

English	3
Algebra	1
Geometry	1
History and Civics.....	1
Natural Science	1
One foreign language.....	2

If circumstances justify, a student may be admitted with a deficiency. Any deficiency must be removed before the beginning of the sophomore year. Foreign language and laboratory science deficiencies are the only ones which may be made up in college with college credit.

2. Entrance Examinations

Admission is granted through the successful passage of entrance examinations. Freshmen not presenting satisfactory entrance credentials must pass an examination in subjects so chosen as to satisfy specific entrance requirements.

3. College Transfer Students

Admission is granted to the student who presents a satisfactory record from a college or university of recognized standing.

A student entering from another college or institution of collegiate rank, must furnish from such institution (1) a certificate of honorable dismissal; (2) an official transcript of all college credits together with entering high school units; (3) a grade point average of 2.0 (a grade average of C), for the term immediately preceding application for admission to Seattle College.

Allowance of advanced credit:

Students who have completed advanced study in colleges and universities of recognized rank, will be allowed whatever credit is acceptable to Seattle College.

Credit from Junior Colleges must not exceed in amount one-half the number of hours required for graduation from a four-year curriculum.

For a full academic year the maximum amount of credit allowed is one-fourth of the number of hours required for graduation from a four-year curriculum.

The senior year is required in residence. In no case will more than three years of credit (135 quarter credits) be accepted toward a bachelor's degree requiring four years of college study. The entire last year of work (45 quarter credits) must be earned at Seattle College.

4. Adult Special Students

Admission is granted to those men and women who qualify as adult special students. Such students must:

Be at least twenty-one years of age.

Submit all available credentials and records of previous work in secondary schools and colleges.

Secure the consent of the Committee on Admissions.

A special student is not eligible for any degree, but may become a regular student and a candidate for a degree by completing the admission requirements of the department in which he is registered.

5. Foreign Students

Admission is granted to foreign students who present credentials which indicate satisfactory preparation for the courses such students desire to pursue.

6. Auditors

A student eligible for regular or for special standing may enroll as an auditor after securing the consent of the dean and the instructor of the course. Students

who attend classes as auditors shall in no case be permitted to take examinations or to obtain credits for such courses. They shall, however, register in the regular manner and pay the regular fee.

REGISTRATION

Enrolling in Courses

Students who have not chosen their Major field of study should consult the Dean of the College who will assist them in the selection of their course. Those who have already chosen their Major should, at the beginning of each quarter, arrange their schedule of studies with the advice and the assistance of their departmental advisor. A regular course consists of 15 credit hours plus the required religion. Registration is not complete until the student has filed his high school credentials or college transcript in the office of the registrar and has received class admittance permits from the office of the treasurer.

Late Registration

Students registering late will be charged a fee of \$1.00 for the first day of instruction and the further cumulative fee of 50 cents for each additional day thereafter up to a total of \$4.00. After the first week of instruction no student will be permitted to register except with the consent of the dean and payment of a late registration fee.

Change of Registration

A fee of one dollar (\$1) is charged for each change of registration or number of changes which are made simultaneously, except that no charge is made when the change is made at the initiative of the college.

Withdrawal from Classes

A student may withdraw from any course at any time prior to the last two weeks of the quarter with the consent of his instructor and the dean. Withdrawal if indicated on the registration books by a "W." If the withdrawal is made after the first four weeks of the quarter, and the student's work has not been satisfactory, he will receive an "E" instead of a "W." Students dropping any course or failing to attend any course for which they have registered without officially withdrawing from the same will be given an "EW" in that course.

Classification of Students

Those students are ranked as Sophomores who have at least forty-five quarter hours with an average of C; Juniors, those who have completed ninety quarter hours with an average of C; Seniors, those who have completed one hundred and thirty-five quarter hours with an average of C.

ADMINISTRATIVE PROCEDURE

Consultation with Instructors

As the members of the faculty of the college are deeply interested in the students' progress, they will be glad to give special help and attention to students whenever such assistance is reasonably requested.

Quarter Hour

The unit of instruction is one hour a week for one quarter. Two hours of work in the laboratory are considered equivalent to one hour of recitation. This unit is called a quarter hour. Therefore, for example, if five quarter hours credit is granted for a subject, there will be five hours of instruction in that subject each week or equivalent two hour periods of laboratory. 180 quarter hours, plus 12 quarter hours in religion for Catholic students, or 12 quarter hours of electives for non-catholic students, are required for a degree at Seattle College.

Major and Minor

Each student in the College of Arts and Sciences and the School of Education should, before the end of the sophomore year, arrange his work to center around some subjects or departments. Such concentrations are called his Major and his Minor.

The various departments of instruction are divided into three groups:

Group I

English
Latin
Greek
French
German
Music
Spanish
Speech
Journalism

Group II

Economics
Education
History
Philosophy
Political Science
Psychology
Sociology

Group III

Biology
Chemistry
Mathematics
Physics

Every student who intends to take a degree in regular courses is required to complete a major in one subject and a minor in a related subject. The major and minor concentrations require the completion of the subjects and the number of hours specified by each department.

Courses passed at D grade are not counted toward the fulfillment of the requirements in the major or minor concentration. The grade point average of the major must be at least 2.5.

Electives

Courses (a) not taken as prescribed courses, and (b) not included in the student's major or minor, may be chosen as free electives to complete the 192 credits required for graduation. Electives should be chosen either with a view of supplementing concentrations or enriching cultural development.

Examinations

Examinations are given at the middle and the end of the quarter, and at such other times during the quarter as the instructors may determine. The result of the mid-quarter and final examinations, combined with the student's class work, will determine the grade for the quarter.

A student absent from a scheduled examination either through sickness or other unavoidable cause may take a special examination under the following conditions:

- (1) He shall obtain a card of authorization from the registrar upon the payment of the special examination fee.
- (2) He shall present the card to his instructor.
- (3) He shall take the examination at the time designated by the instructor.

Reports

Reports containing a record of the class work of each student are sent to parents or guardians at the end of each quarter. The mid-quarter grades are sent to students who are doing less than average work, and serve as indications of the level of work being done.

Marking System

The following is the system of grades used at Seattle College:

- A, (93-100) a superior student
 - Knowledge—excellent
 - Scholarship—exceeding requirements
 - Information—complete and detailed
- B, (85-92) above average student
 - Knowledge—very good
 - Scholarship—meeting all requirements
 - Information—complete but not detailed

- C, (77-84) average student
Knowledge—good
Scholarship—meeting assignments but
Information—incomplete
- D, (70-76) below average student
Knowledge—fair
Scholarship—not meeting assignments
Information—lack of essential and/or false information
- E, failure; I, incomplete; N, hyphenated course which will be completed in a following quarter; W, withdrawn; EW, failed to withdraw officially.

Grade Points

Grade points are computed according to the grade a student obtains in his work. For a grade of A in a given course the student will receive four times as many grade points as there are quarter hours in that course; for a grade of B, three times as many grade points; for a grade of C, twice as many grade points; for a grade of D, as many grade points as there are quarter hours of credit. An I and a W count neither as registered hours nor grade points.

Grade Point Average

In order to compute the grade point average, divide the sum of the total number of grade points by the sum of the total number of quarter hour credits.

Incompletes

An "Incomplete," I, is given only in case the student has been in attendance and has done satisfactory work to a time within two weeks of the close of the quarter. To remove the "incomplete" and assure credit the work must be completed within one month after the beginning of the following quarter, otherwise the course shall be reported with the grade of "E." To remove an "I," by the completion of the work or by a special examination, the student must first secure from the registrar a card of authorization, upon the payment of the special examination fee. The card shall be presented to the instructor and the work completed or examination taken at the times designated by the instructor.

Repeating of Course

Students who have received grades of "D" or "E" may repeat the course in which these grades were obtained and in such cases the grade received the second time shall be the one counted in computing the average required for graduation. For the purpose of determining college honors only the grade received the first time shall be counted.

Probation

Any student failing in any quarter to make one and one-half (1.5) times as many grade points as he has registered hours shall automatically be placed on probation. A student shall remain on probation until his grade points both for the previous quarter and for his entire record are twice as many as his registered hours. During the period of probation no student will be permitted to represent the college in any activity. No student shall be eligible for medals or honors of any kind whose grades during any quarter of the current academic year were such as to place the student on probation.

No student shall be permitted to register for an additional quarter if during two consecutive quarters, while on probation, he has made less than a 1.5 grade point average in each of these quarters. Any student on probation who incurs two failures in any one quarter will be requested to withdraw from the College. Reinstatement of a student dismissed for poor scholarship shall be allowed only after the lapse of one quarter and by special action of the Committee on Admissions.

Class Absence

Students are required to attend all scheduled class exercises and recitations.

No student will receive credit in a subject if he has not attended at least eighty-five per cent of his class periods. Absence shall be counted from the first regularly scheduled meeting of the class each quarter. The roll is called immediately at the beginning of each class exercise. Tardiness counts for absence. Notification of tardiness or absence is mailed daily to parents or guardians.

Representing Seattle College

No student is eligible to represent Seattle College in any student activity unless he is registered at Seattle College for at least 10 quarter hours of regular courses, had passed 10 quarter hours of the curriculum for which he was registered for the quarter of residence previous to participation and has not been placed on probation during the scholastic year.

Honorable Dismissal

A student withdrawing voluntarily from the college is entitled to honorable dismissal under the following conditions:

1. He must be in good standing with the College, i.e., not liable to dismissal on account of failure, excessive absence, tardiness, or breach of discipline.
2. He must make written application to the Registrar.
2. All financial indebtedness must be settled with the College.

Out of Town Students

All undergraduate students not living at home or with immediate relatives are required to live in houses inspected, approved and supervised by the College Administration. A list of such approved living quarters for students may be obtained from the Office of the Dean of Women.

Annual Retreat

The Annual Retreat or Spiritual Exercises is intended for all students. The exercises of the first two days of the retreat treating of topics that concern man as man are obligatory on all, including non-Catholic students. The exercises of the third day of the retreat are optional to non-Catholics.

GRADUATION

Application for Degree

A student shall, by the end of the Winter Quarter, file with the registrar a written application for his degree.

Requirements for Graduation

1. The completion of 180 quarter hours of credit, 60 hours of which are in upper division courses, with a grade point average of 2.0. For Catholic students, the completion of 12 additional quarter hours in religion; for non-Catholic students, the completion of 12 additional quarter hours of electives.
2. The completion of a major and minor sequence selected from related fields. The grade point average of the major must be at least 2.5, and no subject may be applied to the major with a grade less than C.
3. All candidates for the Bachelor's degree must receive a passing grade in the comprehensive oral examination in Philosophy, and Catholic students are required to pass an oral examination in religion.
4. The senior year must be spent in residence at Seattle College. A scholastic year shall be understood to contain three quarters of full time study earning 45 quarter hours of credit.
5. All candidates for degrees must be present at the Commencement Exercises to receive their diplomas.

Graduation Honors

Graduation with honors at Seattle College requires the earning of at least 90 quarter hours as a Junior and Senior at Seattle College, the securing of at least the grade B in the comprehensive oral examination, and the attainment of a high grade point average in the four year curriculum of studies. A candidate who has made an average of 3.25 graduates Cum Laude; one who has made an average of 3.5, Magna Cum Laude; one who has made an average of 3.75, Summa Cum Laude. These honors are inscribed on the diplomas.

Graduation Catalogue

All students shall have the option of being held to the graduation requirements of the catalogue under which they enter, or those of the catalogue under which they expect to graduate. All responsibility for fulfilling the requirements for graduation rests upon the individual student concerned.

The Appointments Office

This office handles requests for varied types of employment for both men and women, ranging from junior executive positions to odd jobs. This service is available to alumni as well as registered students.

Since this office must cooperate with prospective employers only properly qualified applicants are recommended for interviews. The Appointment Office offers opportunities for both part-time and full-time employment.

SCHOLARSHIPS

Thomas C. McHugh scholarship. A perpetual tuition scholarship awarded annually to a graduate from the Seattle Preparatory School in grateful tribute to a generous benefactor.

Father Garrand, S. J., scholarship. A tuition scholarship awarded annually by competitive examination in memory of Rev. Victor Garrand, S. J., the founder of Seattle College.

Father Sweere, S. J., scholarship. A tuition scholarship awarded annually by competitive examination in memory of Rev. Adrian Sweere, S. J., co-founder of Seattle College.

The Garrand and Sweere scholarships are awarded on competitive written examinations in United States history, civics, and high school English. The examinations are given during the month of May at places convenient for students. Any student may take this examination. In addition to being held in the various high schools throughout Washington students may take the examination at Seattle College on the appointed day.

The Music Department of Seattle College offers ten scholarships yearly. The students comprising the Men's Quartet and the Women's Quartet are given tuition scholarships. Walter Aklin awards a piano scholarship to one Freshman student. Mrs. Ella Bordman also offers one voice scholarship to a Freshman student. The winners of the Music Scholarships are decided by auditions held at Seattle College. Appointments for these auditions may be made by contacting the Music Department at the College.

Seattle College awards scholarships annually to the most promising senior students from many of the Catholic High Schools in Washington, including Holy Angel's High School, Seattle; Holy Rosary High School, Seattle; O'Dea High School, Seattle; Bellarmine High School, Tacoma; and Marquette High School, Yakima.

The Seattle College Debate Society sponsors a Northwest Catholic High school Forensic Tournament each year and the best speaker in the Senior Division is given a tuition scholarship for the coming year.

Alumni and alumnae, friends of Seattle College, and all those interested in Catholic higher education are invited to establish a scholarship fund. This will associate your name, or that of a loved one, or a friend, or a group, in the memory of generations of grateful men and women who will have profited by this generosity and will carry on the ideals of Christian living in a world of scientific achievements.

A perpetual tuition scholarship requires \$8000.00

A four year tuition scholarships requires 600.00

A one year tuition scholarship requires 150.00

FORM OF BEQUEST

Seattle, Washington

I..... hereby give,
bequeath and devise to SEATTLE COLLEGE, a corporation duly
incorporated under the laws of the State of Washington, the following

.....
.....
.....
for the use and purposes of said corporation.

(Signed).....

Witnesses:

ANNUAL AWARDS

At Commencement Exercises the following awards are presented to members of the Seattle College Student Body:

The President's Cup is awarded to the most outstanding debater of the Senior Division of the Debating Society.

A Medal, the gift of Mr. and Mrs. William J. Lindberg, is presented to the most promising debater in the Junior Division of the Debating Society.

The Alumni Cup is awarded for Loyalty, leadership and participation in student activities. This award is given by the Alumni of Seattle College to the young man voted by the student body and faculty as most worthy of the honor.

The Alumnae of Seattle College offer a similar award to the young woman judged most worthy.

The Bishop Shaughnessy Medal, an annual award graciously donated by His Excellency, the Most Reverend Gerald Shaughnessy, S. M., S. T. D., Bishop of Seattle, is presented to the senior securing the highest marks in the final examination in Philosophy and Religion.

ACTIVITIES AND ORGANIZATIONS

The Associated Students of Seattle College is the official organization of all the students attending the college. Through the Activities Board it directs and controls all student activities in the college. General meetings are held monthly. Founded 1913.

The Associated Women Students of Seattle College is an organization of all the women students of the college. It organizes and directs activities limited to women students.

The Alumni Association. Its purpose is to foster and preserve a spirit of union among its members, to assist in realizing the ideals of Seattle College and to cooperate in advancing its interests. Founded in 1905 as a Jesuit Alumni Association.

Commerce Club. Divisional Club of the School of Commerce. Meets bi-weekly. Purpose is to familiarize the students with their respective fields of business endeavor by presenting outstanding business leaders, visiting various indus-

tries, etc. All students in the School of Commerce and Finance are requested to be members.

The Sodality of the Blessed Virgin Mary is affiliated with the Prima Primaria in Rome. It is open to all students and meets every second week. It promotes charitable works and discusses Catholic problems. Founded on March 25, 1905.

The Gavel Club is a debating society open to all students. The meetings are held bi-monthly. Founded 1907.

The Mendel Club is open to pre-medical, pre-dental, laboratory technician and nursing students. Meetings held weekly. There is usually a visiting lecturer on medical topics. Founded in 1934.

The Chemist Club, founded in 1945, is open to all chemistry majors.

Alpha Nu is an association of pre-legal students.

The Drama Guild presents a number of plays each year. Any student may try-out for student productions. Founded in 1907.

The International Relations Club. The meetings consist of round table discussions of international topics with occasional addresses by public figures. Books are supplied by the International Relations Council, a branch of Carnegie Peace Foundations. Meetings held bi-monthly.

The Book Review Club meets bi-monthly to present and discuss reviews on recent publications.

The Seattle College Spectator is the official news organ of the student body. It is published weekly and circulates to students, alumni, colleges and friends of Seattle College. The Spectator was first published in 1933. It is managed by a student editor and staff and has a faculty moderator.

The Aegis, Seattle College Annual, was presented for the first time in 1937. All the material is written and arranged by the student members of the Aegis staff.

The Wigwam Chapter of the Intercollegiate Knights is a national service organization. Members are chosen from the freshman and sophomore male students.

The "SC" Club. Membership is open to undergraduates who have earned a letter in College athletics. The association was founded in 1904 to promote athletics.

The Hiyu Coolee is a hiking club organized to foster healthful outdoor exercise.

The Ski Club is organized to promote winter sports.

STUDENT HONORARIES

Alpha Epsilon Delta, the Washington Alpha Chapter of a National organization for pre-medical students. Any pre-medical student with a good academic record is eligible.

Alpha Tau Delta is the Seattle College Nu Chapter of the national honorary for nurses registered for a degree. Members must have a minimum of 45 quarter hours and a scholastic standing of 2.7.

Alpha Sigma Nu is a national honorary for men. Juniors and Seniors.

Gamma Sigma Alpha is a local publications honorary. The required grade point average plus three quarters on the Spectator staff or in the publicity department is necessary for membership.

Kappa Gamma Pi, Seattle College graduate women's honorary and a national organization. Graduates of any Catholic College are eligible.

Lambda Tau is a local honorary organization for laboratory technicians. Five quarters residence is required of student members.

Mu Sigma, music honorary, is open to music students.

Silver Scroll is a local women's organization with a limited active membership of fifteen. This Activities honorary requires 90 quarter hours and 2.7 academic standing for membership.

STUDENT EXPENSES

TUITION AND FEES ARE PAYABLE IN ADVANCE

TUITION

Tuition per quarter (10 to 15 hours).....	\$50.00
Extra hours (over 15) each.....	5.00
Less than 10 hours, per quarter hour.....	5.00

Music

Voice and instrumental lessons per quarter	
One half-hour lesson per week.....	25.00
Piano practice per quarter (one hour daily).....	5.00
Organ practice per quarter (one hour daily).....	20.00
Night School, per quarter hour.....	5.00
Night Psychiatry	15.00
Auditors, per quarter hour.....	5.00
Extension courses, per quarter hour.....	5.00
Credit by examination, per quarter hour.....	5.00

FEES

Regular Fees:

Registration Fee per quarter.....	1.00
Library Fee per quarter	
Day Students	3.00
Night Students	1.00
Student Fee per quarter.....	3.00

Occasional Fees:

Matriculation, paid once at first entrance.....	5.00
High School Deficiency, per course	
Geometry	10.00
Algebra	10.00
English	10.00
Change of registration, per change.....	1.00
Late registration, added to Tuition and Fees, \$1.00 for the first day and 50 cents for each additional day, not to exceed a total of.....	4.00
Special examination	2.50
Removal of incomplete.....	1.00
Withdrawal Fee	1.00
One-half the tuition but no fees will be refunded if the student withdraws from school within the first five class days of any quarter.	
Graduation Fee	15.00
Duplicate transcript	1.00

Special Service—Reader Service will be furnished entitled disabled veterans as required, cost not to exceed the rate of \$.75 per hour; provided that the course, including reader, does not exceed a total of \$780.00 per year.

Laboratory Fees:

Anatomy 105	2.50
Bacteriology 101, 102, each.....	2.50
Chemistry 1, 2, 7, 11, 12, 21, 23, 101, 109, 110, 111, 112, 134, 160, 181, 181, 182, 183, each.....	5.00
Breakage ticket, per course.....	1.00
Chemistry 131, 132, 133, each.....	6.50
Breakage ticket, per course.....	1.00
Dietetics 9, 10, 11, 105, 170, each.....	3.00
Engineering	
Electrical 10, 11, 12, 81, 82, 83, 91, 92, 93, 95, 96, 97, 98, 101, 102, 103, 150, 151, 152, 160, 161, 170, 171, 180, 190, each.....	10.00
Chemical 143, 151, each.....	10.00
Civil 3, 4, 5, 6, 104, 106, 112, 154, 161, 162, 173, each.....	10.00
Mechanical 4, 5, 6, 7, 171, 172, each.....	12.00
104, 105, 130, 161, each.....	10.00
Physics—all courses except 95, each.....	5.00
Physiology 7, 53, 54, each.....	5.00
Secretarial Studies 20, 21, 22, 116, each.....	5.00
Zoology 100, 127, each.....	3.00
3, 4, each.....	5.00

Books may be secured at the College Bookstore at current rates.

PROGRAMS OF STUDY

COLLEGE OF ARTS AND SCIENCES confers the following degrees:

Bachelor of Arts, A.B., with a major in economics, English, history, languages, mathematics, music, philosophy, political science, sociology.

Bachelor of Science, B.S., with a degree course in biology or chemistry; or a major in biology, chemistry, mathematics.

Bachelor of Science, B.S., in Social Science, with a major in economics, history, political science, sociology.

Bachelor of Philosophy, B.Ph., with a major in English, languages, mathematics, music, philosophy.

Bachelor of Music, B.M., with a degree course in music.

Bachelor of Science, B.S., in secretarial studies.

SCHOOL OF COMMERCE confers following degree:

Bachelor of Commercial Science with a major in accounting, finance, foreign trade and labor.

SCHOOL OF EDUCATION confers the following degrees:

Bachelor of Arts, A.B., Bachelor of Science, B.S., with a major in education or a major selected from the arts or sciences.

SCHOOL OF ENGINEERING confers the degree of Bachelor of Science, B.S., in aeronautical, chemical, civil, electrical, mechanical engineering.

SCHOOL OF NURSING confers the following degrees:

Bachelor of Science, B.S., in nursing and in nursing education.

Bachelor of Science, B.S., in medical technology.

Bachelor of Science, B.S., in dietetics.

THE GRADUATE SCHOOL confers the degrees of Master of Arts, M.A., and Master of Science, M.S.

COLLEGE OF ARTS AND SCIENCES

Rev. A. B. Corrigan, S. J., Dean

BACHELOR OF ARTS

The Bachelor of Arts degree is granted with a major in economics, education, English, history, languages, mathematics, music, philosophy, political science, sociology.

First Year

5 Composition 1	5 History 1 ✓	5 History 2 ✓
5 Latin	5 Latin	5 Sociology 1 or 7 ✓
5 Science or Math.	5 Science or Math. ✓	5 Composition 2 ✓
3 Apologetics 102*		

Second Year

5 Latin	5 Logic 1	5 Psych. 1
5 Literature	5 Mod. Language 2	5 Econ. 3 or Politics
5 Mod. Language 1	5 Elective	5 Mod. Language 3
3 Moral Guidance 165*		

Third Year

5 Literature	5 Mod. Language 4	5 Speech
3 Phil. of Being 100	3 Phil. of God 101	10 Major, Minor, Elective
7 Major, Minor, Elective	7 Major, Minor, Elective	
4 or 2 Religion*		

Fourth Year

5 General Ethics Pl. 150	5 Special Ethics Pl. 151	15 Major, Minor, Elective
10 Major, Minor, Elective	5 Literature	
	5 Major, Minor, Elective	
2 or 4 Religion*		

*Non-Catholics substitute electives for religion.

BACHELOR OF SCIENCE**DEGREE IN BIOLOGY****First Year**

5 Chemistry 1	5 Chemistry 2	5 Chem. Qual. 23
5 Zoology 3	5 Zoology 4	5 Physiology 7
5 Composition 1	5 History 2	5 Logic Pl. 1
3 Apologetics 102*		

Second Year

5 Chem. Organic 131	5 Chem. Organic 132	5 Chemistry 111 or 160
5 Algebra 2	5 Trigonometry 3	5 German 3
5 German 1	5 German 2	5 Speech 40
3 Moral Guidance 165*		

Third Year

5 Bacteriology 101	5 Bacteriology 102	5 Anatomy 105
5 Psychology 1	3 Phil. of Being 100	5 Bacteriology 103 or
3 German 114	5 Literature	Zoology 100
2 Elective	2 Elective	3 Phil. of God 101
	4 or 2 Religion*	5 Soc. or Econ. 3

Fourth Year

5 Bacteriology 103	5 Special Ethics Pl. 151	5 Anatomy 105
or Zoology 127 or 128	5 Elective	Bacteriology 103 or
5 General Ethics Pl. 150	5 Physics 90	Zoology 100
5 Physics 89	10 Elective	
2 or 4 Religion*		

MAJOR IN BIOLOGY

The curriculum for the FIRST YEAR, SECOND YEAR, and THIRD YEAR are the same as for the above degree course in biology.

Fourth Year

5 Bacteriology 103	5 General Ethics Pl. 150	5 Anatomy 105,
5 Zoology 127 or 128	5 Special Ethics Pl. 151	Bacteriology 103 or
5 Physics 10	10 Elective	Zoology 100
	2 or 4 Religion*	10 Elective

*Non-Catholics substitute electives for religion.

BACHELOR OF SCIENCE**DEGREE IN CHEMISTRY****First Year**

5 Chemistry 21	5 Chemistry 22	5 Chem. Qual. 23
5 Algebra	5 Trigonometry 3	5 Anal. Geometry 6
5 Composition 1	5 Literature	5 Logic Pl. 1
3 Apologetics 102*		

Second Year

5 Chem. Organic 131	5 Chem. Organic 132	5 Chem. Organic 133
5 Calculus 101	5 Calculus 102	5 German 3
5 German 1	5 German 2	5 Psychology 1
3 Moral Guidance*		

Third Year

5 Chem. Quan. 109	5 Chem. Quan. 110	3 Phil. of God 101
5 Physics 1	5 Physics 2	5 Physics 3
3 German 114	3 Phil. of Being 100	5 History 2
5 Speech 40		2 Elective
4 or 2 Religion*		

Fourth Year

5 Chem. Physical 181	5 Chem. Physical 182	5 Chem. Physical 183
5 General Ethics Pl. 150	5 Special Ethics Pl. 151	10 Elective
5 Soc. or Econ.	5 Elective	
2 or 4 Religion*		

MAJOR IN CHEMISTRY OR MATHEMATICS**First Year**

5 Chemistry 21	5 Chemistry 22	5 History 2
5 Algebra 2	5 Trig. 3	5 Composition 2
5 Composition 1	5 History 1	5 Major
3 Apologetics 102*		

Second Year

5 Physics 1	5 Physics 2	5 Physics 3
5 Mod. Language 1	5 Mod. Language 2	5 Mod. Language 3
5 Logic Pl. 1	5 Psychology 1	5 Economics 3
3 Moral Guidance 165*		

Third Year

3 Mod. Language	3 Phil. of Being 100	3 Phil. of God 101
5 Soc. 5 or 7	5 Literature	10 Major, Minor, Elective
5 Speech 40	5 Major	
5 Major	2 Elective	
4 or 2 Religion*		

Fourth Year

5 General Ethics Pl. 150	5 Special Ethics Pl. 151	15 Major, Minor, Elective
10 Major, Minor, Elective	10 Major, Minor, Elective	
2 or 4 Religion*		

*Non-Catholics substitute electives for religion.

BACHELOR OF SOCIAL SCIENCE

The Bachelor of Science in social studies is granted with a major in economics, education, history, political science, sociology.

First Year

- 5 Composition 1 ✓
 5 Mod. Language 1 or 3 ✓
 5 Economics 1 ✓
 5 History 1 ✓
 5 Mod. Language 2 or 4 ✓
 5 Economics 2 ✓
 3 Apologetics 102*
 5 History 2 ✓
 5 Mod. Language 3 ✓
 5 Composition 2 ✓

Second Year

- 5 Soc. 1 ✓
 5 Science or Math. ✓
 5 Literature ✓
 5 Logic Pl. 1 ✓
 5 Science or Math. ✓
 5 Mod. Language 4 ✓
 3 Moral Guidance 165*
 5 Psychology 1 ✓
 5 Politics ✓
 5 Sociology 5 ✓

Third Year

- 5 Literature ✓
 3 Phil. of Being ✓
 5 Major, Minor, Elective
 3 Phil. of God 101 ✓
 12 Major, Minor, Elective
 5 Speech ✓
 10 Major, Minor, Elective
 4 or 2 Religion*

Fourth Year

- 5 General Ethics, Pl. 150 ✓
 10 Major, Minor, Elective
 5 Special Ethics, Pl. 151 ✓
 5 Politics
 5 Major, Minor, Elective
 2 or 4 Religion*
 15 Major, Minor, Elective

*Non-Catholics substitute electives for religion.

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BACHELOR OF PHILOSOPHY

The Bachelor of Philosophy degree is granted with a major in English, languages, mathematics, music, philosophy.

First Year

5 Composition 1	5 Composition 2	5 History 2
5 Mod. Language 1 or 3	5 Mod. Language 2 or 4	5 Mod. Language 3
5 History 1	5 Soc. 1	5 Soc. 5
3 Apologetics 102*		

Second Year

5 Literature	5 Science or Math.	5 Econ. or Politics
5 Science or Math.	5 Logic Pl. 1	5 Psychology 1
5 Econ. or Politics	5 Md. Language 4	5 Elective
3 Moral Guidance 165*		

Third Year

3 Phil. of Being 100	3 Phil. of God 101	5 Speech
12 Major, Minor, Elective	12 Major, Minor, Elective	10 Major, Minor, Elective
4 or 2 Religion*		

Fourth Year

5 General Ethics Pl. 150	5 Special Ethics Pl. 151	15 Major, Minor, Elective
10 Major, Minor, Elective	5 Literature	
	5 Major, Minor, Elective	
2 or 4 Religion*		

BACHELOR OF SCIENCE
in
SECRETARIAL STUDIES

First Year

5 Composition 1	5 Composition 2	5 History 2
5 Shorthand 16	5 Shorthand 17	5 Shorthand 18
3 Typing 20	3 Typing 21	3 Typing 23
2 Elective	2 Elective	2 Elective
3 Apologetics*		

Second Year

5 Accounting 30	5 Accounting 31	5 Accounting 40
5 Economics 1	5 Economics 2	5 Psychology 1
5 Soc. 7	5 Logic Pl. 1	5 Bus. English 115
3 Moral Guidance*		

Third Year

5 Office Management 101	5 Office Machines 116	5 Money and Banking 60
5 Business Law 10	5 Business Law 114	5 Phil. God Pl. 101
5 Speech 40	3 Phil. Being Pl. 100	7 Elective
4 or 2 Religion*		

Fourth Year

5 General Ethics 150	5 Special Ethics	5 Politics 1
5 Literature	5 Labor Problems	10 Elective
5 Elective	5 Elective	
2 or 4 Religion*		

*Non-Catholics substitute electives for religion.

PRE-PROFESSIONAL PROGRAMS

PRE-DENTAL STUDIES

Rev. Gerald R. Beezer, S. J. Adviser

The minimum requirements for entrance to a school of dentistry, in accordance with standards of the American Association of Dental Schools and the Council on Dental Education, are the completion of two years, 90 credits of collegiate work in an approved college of arts and sciences. The pre-dental studies include prescribed courses in general chemistry, biology, physics, and English. Students should learn, however, the entrance requirements of the Dental College to which they will seek admission.

The following electives are suggested for the completion of the required pre-dental credits: Comparative anatomy, economics, English, history, mathematics, modern language, philosophy, sociology, speech.

First Year

5 Chemistry 1	5 Chemistry 2	5 Chem. Qual. 23
5 Composition 1	5 Composition	5 Logic Pl. 1
5 Zoology Bl. 3	5 Zoology Bl. 4	5 Literature
3 Apologetics 102*		

Second Year

5 Chem. Organic 137	5 Physics	5 Physics
5 General Ethics Pl. 150	5 Special Ethics Pl. 151	10 Electives
5 Elective	5 Elective	
3 Moral Guidance 165*		

PRE-LEGAL STUDIES

Rev. Vincent M. Conway, S. J. Adviser

Students who wish to prepare for the study of law should learn the entrance requirements of the institution to which they shall seek admission. Those who have not determined upon a school of law are advised to follow the pre-legal curriculum outlined below. Additional quarters of work should be planned with the assistance of the adviser.

First Year

5 Composition 1	5 Composition 2	5 Politics
5 Eng. History 171	5 Eng. History 172	5 Eng. History 173
5 Economics 1	5 Economics 2	5 Literature
3 Apologetics 102*		

Second Year

5 Logic Pl. 1	5 Psychology 1	5 Politics
5 Literature	5 General Ethics Pl. 150	5 Special Ethics Pl. 151
5 Elective	5 Sociology 5	5 Elective
3 Moral Guidance 165*		

*Non-Catholics substitute electives for religion.

BACHELOR OF SCIENCE—PRE-MEDICAL**Rev. Gerald R. Beezer, S. J. Adviser**

The minimum requirements for admission to medical school is usually three years of work in an approved college of Arts and Sciences. The American Medical Association has approved the premedical curriculum offered at Seattle College. The best preparation, however, is a complete four-year course leading to a bachelor's degree which allows the student an opportunity to gain a broad cultural background while fulfilling the essentials required by all medical schools.

Students should decide before the end of their sophomore year whether or not they wish to complete a four year curriculum and earn a Bachelor of Science Degree. The departments of Chemistry and Biology are recommended to such students for their field of major concentration.

First Year

5 Chemistry 1	5 Chemistry 2	5 Chem. Qual. 23
5 Composition 1	5 Composition 2	5 History 2 or 50
5 Algebra 2	5 Trigonometry 3	5 Economics 3
3 Apologetics 102*		

Second Year

5 Chem. Organic 131	5 Chem. Organic 132	5 Chem. Quant. 111
5 Zoology Bl. 3	5 Zoology Bl. 4	5 Physiology Bl. 7
5 Logic Pl. 1	5 Psychology 1	5 Literature 65
3 Moral Guidance 165*		

Third Year

5 Physics 1	5 Physics 2	5 Physics 3
5 German 1	5 German 2	5 German 3
3 Phil. of Being 100	5 General Ethics Pl. 150	5 Special Ethics Pl. 151
5 Speech	4 or 2 Religion*	

Fourth Year

5 Bl. 100 or 101	3 Phil. of God 101	12 Elective
3 German 114	5 Sociology 7	
7 Elective	7 Elective	
2 or 4 Religion*		

*Non-Catholics substitute electives for religion.

THE SCHOOL OF COMMERCE AND FINANCE

The School of Commerce and Finance is designed to offer the student a professional or technical training in private and government enterprise.

The world of commerce and finance is increasingly complex and specialized. College training, for it to be effective, requires more than the traditional passing emphasis upon economics but a concentration upon the fundamentals of business, combined with specialization in the fields of accounting, finance, labor, foreign trade, etc.

To divorce business and morality is irrational and the social consequences

are tragic. The School of Commerce and Finance offers a program of studies intellectually integrated and spiritually animated by Christian thought.

Both students and graduates are provided with the opportunity of professional contacts by the Appointments Office and through the student association sponsored by the School. The Commerce Club provides a meeting place for all commerce and finance students and outstanding business leaders invited to the bi-weekly meetings. The various fields of specialization are allied with business institutions by way of the Labor-Management Forum, Accounting Association and Foreign Trade Institute.

The School of Commerce and Finance grants the degree, Bachelor of Commerce Science with a major in accounting, finance, foreign trade and labor.

BACHELOR OF COMMERCIAL SCIENCE

First Year

- | | | |
|----------------------|--------------------|---------------------|
| 10 Economics 1, 2 | 5 Business Law 10 | 10 Composition 1, 2 |
| 10 Accounting 30, 31 | 5 History 2 | 5 Business Math. 40 |
| | 3 Apologetics 102* | |

Second Year

- | | |
|------------------------|--------------------------------|
| 5 Statistics 50 | 5 Literature |
| 5 Business Law 11 | 3 Moral Guidance 165* |
| 5 Money and Banking 60 | 5 Major Field |
| Accounting 65 | Accounting |
| 5 Politics 1 | Intermed. Acct. I, 80 |
| 5 Logic 1 | Finance—Foreign Trade—Labor |
| 5 Psychology 1 | Comparative Banking Systems 75 |

Third Year

- | | |
|--------------------------------------|----------------------------------|
| 5 International Econ. Relations 100 | Accounting |
| 5 Labor Problems 105 | Intermed. Accounting II, 1, 2, 3 |
| 5 The Americas 151 | Cost Accounting 130 |
| 5 Marketing and Advertising 115 | Auditing 131 |
| 5 Corporation Finance 117 | Finance—Foreign Trade |
| 5 Investments and Security Anal. 120 | Transportation 122 |
| 6 Phil. of Being and God 100, 101 | Principles of Foreign Trade 125 |
| 2-4 Religion* | Labor |
| 10 Major Field | Labor Law and Relations 135 |
| | History of Labor in U. S. 136 |

Fourth Year

- | | |
|---|---|
| 5 Public Finance and Taxation 150 | Finance |
| 5 History of Econ. Thought 155 | Adv. Money and Banking 165 |
| 5 Business Cycles 160 | Govt. and Business 170 |
| 5 Seminar in Com. and Finance 197 | Personnel Adm. 175 |
| 5 Ethics 150 | Foreign Trade |
| 5 Ethics 151 | Govt. and Business 170. |
| 5 Literature | Adv. Foreign Trade 195 |
| 2 or 4 Religion* | Pacific Commerce 196 |
| 15 Major Field | Labor |
| Accounting | Govt. and Business 170 |
| Adv. Acct. Taxation 185 | Personnel Adm. 175 |
| Adv. Accounting C.P.A. Problems 1, 186 | Collective Bargaining in U. S. and Abroad 190 |
| Adv. Accounting C.P.A. Problems 11, 187 | |

* Non-Catholics substitute electives for religion.

SCHOOL OF EDUCATION

Rev. James B. McGoldrick, S. J., Director

GENERAL STATEMENT

The School of Education embraces five years of college work and requires a minimum of 237 credits (quarter hours). Of these 237 credits, 192 are required for the Bachelors degree (B.A. or B.S.) and 45 for the fifth year.

Courses in Education should be preceded or accompanied by courses in psychology, (general, child and adolescent), ethics, sociology, economics, history, literature and kindred subjects. It is essential that the educator have a thorough liberal background as a secure foundation for subsequent professional training.

Professional work in education begins in the sophomore year, with Education 1. Later courses in education are open to students who have completed two years of college work.

Advanced credit for work taken in approved teachers' colleges or normal schools by students previously graduated from an accredited four-year secondary school will be allowed at the rate of 45 credits for each full year's work completed in such schools.

Requirements for Three-Year Secondary Certificate

The requirements for certification and credentials at Seattle College are those explicitly demanded by the State of Washington, Department of Public Instruction, in its "Certification of Teachers and Administrators." The following are the minimal requirements adopted (May, 1943) by the State Board of Education for certificate and credentials. These requirements are made obligatory at Seattle College and are as follows:

Three-Year Secondary Certificate

Applicants for secondary certification must have completed, in a fully accredited college or university, a five-year course designed for the training of secondary teachers and including at least forty-five quarter hours (thirty semester hours) in addition to the number of hours regularly required by the institution for a bachelor's degree.

In this five-year course every applicant must have included at least fifteen quarter hours in contemporary social problems. Courses in current history, political science, economics, and sociology will satisfy this requirement. Courses in modern history, education, English, etc., are not acceptable unless a description of the course shows clearly that the field covered is contemporary history or contemporary social problems.

Besides a broad and general background, applicants for secondary certificates must have completed one teaching major of thirty-six quarter hours and two teaching minors of at least eighteen quarter hours each, except that a minimum of forty-five quarter hours shall constitute a major in English and twenty-five quarter hours a minor.

A major or a minor must consist of subjects in a specific and homogeneous field. The State Board of Education does not recognize a major or a minor in science, composed of chemistry, physics, astronomy, geology, etc. Similarly, in the social sciences, a combination of history, economics and political science cannot be accepted as a teaching major. Minors cannot be mere subdivisions or areas of the major field.

Majors and minors must be in distinct high school subject matter areas regularly offered in the secondary schools of Washington. Courses, therefore, in

education, philosophy, Greek and forestry are not acceptable toward satisfying the requirements for majors and minors.

No one may qualify for a secondary certificate unless he has maintained in his scholastic record a cumulative grade point of "C" or better.

Applicants must include in their college course at least twenty-four quarter hours in education. Not less than three (except in special methods, in which case two quarter hours will be acceptable) nor more than six quarter hours are accepted in each of the following courses toward satisfying the required twenty-four quarter hours:

- a. Educational psychology (general psychology may not be substituted for educational psychology). 3-6.
- b. General methods, or principles of teaching. 3-6.
- c. Secondary education. 3-6.
- d. Special methods. 2-6.
- e. Additional elective hours in Education to complete a total of twenty-four quarter hours.

Applicants will be required to file satisfactory evidence of having completed four quarter hours of directed teaching or eight months of successful teaching experience, provided that not more than nine quarter hours in directed teaching be included in the total of twenty-four quarter hours. Cadet teaching is taken either during the senior or fifth year. The Cadet teaching takes place in the local high schools and is on the semester rather than on the quarter basis.

Summary of Requirements for Three-Year Secondary Certificate

1. A total of 237 credits; 192 in the A.B. and 45 for the fifth year.
2. At least 15 quarter hours in contemporary social problems.
3. One teaching major of 36 quarter hours and two teaching minors of at least 18 quarter hours each.
4. A minimum of 24 quarter hours in education. Not less than 3 quarter hours (except in Special Methods, in which case 2 quarter hours will be acceptable) nor more than 6 quarter hours must have been completed in each of the following:
 - a. Educational Psychology. b. Secondary Education. c. General Methods or Principles of Teaching. d. Special Methods.
 - e. Additional elective hours in education to complete a total of 24 quarter hours.
5. Four quarter hours of directed teaching, or 8 months of successful teaching experience.
6. Applicants must have satisfied the Washington State Manual Requirements and Washington State History and Government.

Renewal of Three-Year Secondary Certificate

The three-year secondary certificate is non-renewable except when a standard certificate cannot be obtained because of lack of experience, in which case the renewal shall be for three years.

CONVERSION OF THREE-YEAR SECONDARY CERTIFICATE FOR SIX-YEAR STANDARD SECONDARY CERTIFICATE

One who has qualified for a three-year secondary certificate and taught successfully for at least two years upon that certificate may exchange it for the six-year standard secondary certificate.

Renewal of Standard Six-Year Certificate

The six-year standard secondary certificates may be renewed with two years of successful teaching experience and nine quarter hours of credit. Three quarter hours of credit may be earned by submitting to the State Superintendent of Public Instruction a creditable report on either travel or independent professional work. It should be noted that travel and independent professional work are acceptable only toward renewal of the six-year certificates.

It is assumed that teachers in service satisfied the specific requirements when the original certificates were issued to them. In order to renew a certificate, therefore, a teacher is free to choose the subjects which in his opinion are most valuable to him.

Secondary certificates are valid in grades 9 to 12 inclusive and in grades 7 and 8 if these grades are a part of an accredited junior high school.

HIGH SCHOOL PRINCIPAL'S CREDENTIAL

a. Two or more years of successful experience as a high school principal prior to September 1, 1943, or

b. At least two years of successful teaching experience on the secondary level plus twelve quarter hours of professional courses relating to secondary organization, supervision, and administration taken subsequent to at least one year's teaching experience. Not less than six quarter hours of the required number of credits must be from List A below covering at least two of the enumerated fields. The remaining credits may be from either list. Other courses presented toward satisfying the requirement for the high school principal's credential must have been completed within ten years prior to date of application.

List A

- High School Administration and Supervision
- High School Curriculum
- Guidance
- School Finance

List B

- Educational Research
- Extracurricular Activities
- Health and Physical Education
- Tests and Measurements

A secondary certificate is a prerequisite for a high school principal's credential.

SCHOOL OF ENGINEERING

Rev. Edmund B. McNulty, S. J., M.S. in Eng., Director

Aim

The School of Engineering was inaugurated by Seattle College to afford young men the opportunity of preparing for the engineering profession in a thoroughly Christian system of education. The Faculty strives to develop young men who will have a broad knowledge of Engineering and who will appreciate the work and viewpoint of the profession. The graduate of the School is expected to have a thorough knowledge of the basic sciences and of their application to the various fields of Engineering as well as such specialized training in the field of his choice as will enable him to take his place in Engineering as it is today in America.

AERONAUTICAL ENGINEERING

First Year

1st Quarter

- 5 Eng. Chem. (Ch. 21)
- 3 Eng. Drawing (M. E. 1)
- 5 Col. Algebra (Math. 7)
- 3 Eng. Problems (C. E. 1)

2nd Quarter

- 5 Eng. Chem. (Ch. 22)
- 3 Eng. Drawing (M. E. 2)
- 5 Trigonometry (Math. 8)
- 2 Eng. Problems (C. E. 2)

3rd Quarter

- 5 English Comp. 1
- 4 Plane Surveying (C. E. 3)
- 3 Religion 102
- 5 Anal. Geom. (Math. 9)

Second Year

1st Quarter

- 5 Eng. Physics 97
- 5 Di. Cal. (Math. 101)
- 5 Technical Comp. 2
- 2 Prod. Processes (M. E. 4)

2nd Quarter

- 5 Eng. Physics 98
- 5 Int. Cal. (Math. 102)
- 4 Mechanism (M. E. 61)
- 3 Descriptive Geometry (M. E. 3)

3rd Quarter

- 5 Eng. Physics 99
- 3 Applied Mech. (C. E. 71)
- 2 Mach. Drawing (M. E. 62)
- 2 Prod. Processes (M. E. 5)
- 3 Religion 165

Third Year**1st Quarter**

- 5 Logic 1
- 3 Aircraft Mechanics (A. E. 171)
- 5 Eng. Thermodynamics (M. E. 102)
- 3 Aerodynamics (A. E. 101)

2nd Quarter

- 3 Phil. 100
- 5 St. of Materials (C. E. 103)
- 5 Fund. Elect. (E. E. 10)
- 3 Aircraft Mechanics (A. E. 172)

3rd Quarter

- 5 Hydraulics (C. E. 106)
- 5 Fund. Elect. (E. E. 11)
- 3 Airplane Performance (A. E. 103)
- 3 Adv. Aircraft Mechanics (A. E. 173)

Fourth Year**1st Quarter**

- 5 Psychology 1
- 3 Materials Testing (M. E. 151)
- 3 Airplane Deesign (A. E. 111)
- 3 Refrigera. (M. E. 161)
- 3 Mech. Eng. (M. E. 171)

2nd Quarter

- 5 General Ethics 150
- 3 Aerial Propulsion (A. E. 141)
- 1 Wind Tunnel Lab. (A. E. 105)
- 3 Fuels and Lubricants (Ch. 151)
- 3 Advanced Aeriodynamics (A. E. 102)

3rd Quarter

- 5 Special Ethics 151
- 3 Mech. Eng. Lab. (M. E. 173)
- 3 Advanced Airplane Design (A. E. 112)
- 2 Spec. and Contracts
- 3 Gas Engines (M. E. 110)

CHEMICAL ENGINEERING**First Year**

5 Eng. Chem. 21	5 Eng. Chem. 22	5 Qual. Anal. Chem. 23
3 Eng. Drawing ME 1	3 Eng. Drawing ME 2	3 Physics 96
5 Algebra 7	5 Trigonometry 8	5 Anal. Geometry 9
5 Eng. Comp. 1	5 Eng. Problems CE 1	5 Literature 65

Second Year

5 Eng. Physics 97	5 Eng. Physics 98	5 Calculus 103
5 Quant. Anal. CH 109	5 Quant. Anal. CH 110	5 Fund. E.E. 10
5 Calculus 101	5 Calculus 102	3 Mechanics CE 71
3 Religion 102	2 Religion 104	5 Logic 1

Third Year

5 Organic CH 131	2 Prod. Processes ME 4	
3 Mechanics CE 72	5 St. of Mat. CE 103	4 Physical Metallurgy ME 120
5 Fund. E.E. 11	5 Fund. E.E. 12	5 Heat and Power ME 110
5 Psychology 1	3 Philosophy 100	3 St. of Mat. CE 104
5 Organic CH 132	3 Chem. Engineering CH 141	

Fourth Year

5 Phys. Chem. CH 181	5 Chem. Engr. CH 143	5 Phys. Chem. CH 182
5 Chem. Eng. 142	3 Fuels and Lubricants CH 151	5 Chem. Engr. CH 144
3 Religion 165	5 Gen. Ethics 150	5 Special Ethics 151
3 Philosophy 101		5 Phys. Chem. CH 183
		2 Religion 107

CIVIL ENGINEERING**First Year**

5 Eng. Chem. 1	5 Eng. Chem. 2	3 Physics 96
3 Eng. Drawing ME 1	3 Eng. Drawing ME 2	3 Desc. Geometry ME 3
5 Eng. Algebra 7	5 Trigonometry 8	5 Anal. Geometry 9
5 Eng. Comp. 1	5 Eng. Problems CE 1	5 Literature 65
		3 Plane Surveying CE 3

Second Year

5 Eng. Physics 97	5 Eng. Physics 98	5 Fund. EE 10
5 Diff. Calculus 101	5 Int. Calculus 102	5 Calculus 103
3 Surveying CE 4	3 Surveying CE 5	3 Surveying CE 6
5 Logic 1	5 Psychology 1	3 Mechanics CE 71
		2 Prod. Processes ME 4

Third Year

5 Fund. Elec. EE 11	5 Fund. Elec. EE 12	3 St. of Mat. CE 104
3 Mechanics CE 72	5 Struct. Anal. CE 110	5 Heat and Power ME 110
3 Geology CE 85	5 St. of Mat. CE 103	4 Physical Metallurgy ME 120
3 Philosophy 100	3 Philosophy 101	3 Religion 102
3 Religion 165	4 Struct. Anal. CE 111	

Fourth Year

- | | | |
|---------------------------|-------------------------------|---------------------------|
| 3 Wat. Sup. & Sew. CE 171 | 3 Hydrol. & Wat. Power CE 163 | 5 St. Ind. Struct. CE 181 |
| 3 Hydraulics 106 | | 3 Airport Design CE 190 |
| 4 Struct. Design CE 112 | 4 Sani. Eng. CE 173 | 4 Highway Design CE 154 |
| 5 Rein. Concrete CE 161 | 4 Rein. Concrete CE 162 | 5 Special Ethics 151 |
| 3 Eng. Reports CE 101 | 5 General Ethics 150 | 2 Religion 107 |
| 2 Religion 104 | | 0 Field Trips CE 195 |

ELECTRICAL ENGINEERING**First Year**

- | | | |
|----------------|----------------------|-----------------------|
| 5 Chem. 1 | 5 Chem. 2 | 3 Physics 96 |
| 5 Algebra 7 | 5 Trigonometry 8 | 5 Anal. Geometry 9 |
| 3 Drawing ME 1 | 3 Drawing ME 2 | 3 Desc. Geometry ME 3 |
| 5 Comp. 1 | 5 Eng. Problems CE 1 | 3 Surveying CE 3 |
| | 5 Literature 65 | |

Second Year

- | | | |
|----------------|------------------------|-------------------|
| 5 Physics 97 | 5 Physics 98 | 5 Fund. EE 10 |
| 5 Calculus 101 | 5 Calculus 102 | 5 Calculus 103 |
| 3 Religion 102 | 3 Mechanism ME 61 | 3 Mechanics CE 71 |
| 5 Logic 1 | 2 Prod. Processes ME 4 | 2 Religion 104 |
| 5 Psychology 1 | | 3 Philosophy 100 |

Third Year

- | | | |
|------------------------|------------------------|------------------------|
| 5 Fund. EE 81 | 5 Fund. EE 82 | 5 Fund. EE 83 |
| 3 Communications EE 95 | 3 Communications EE 96 | 3 Communications EE 97 |
| 3 Electronics EE 91 | 3 Electronics EE 92 | 3 Electronics CE 93 |
| 3 Mechanics CE 72 | 5 St. of Mat. CE 103 | 3 St. of Mat. CE 104 |
| 3 Philosophy 101 | 3 Religion 165 | 5 Heat & Power ME 110 |

Fourth Year

- | | | |
|------------------------|--------------------------|------------------------------|
| 2 Communications EE 98 | 5 A.C. Machines EE 102 | 3 Transients EE 161 |
| 5 D.C. Machines EE 101 | 5 †Elec. Power EE 171 | 3 †Elec. Mach. Design EE 180 |
| 3 †Hydraulics CE 106 | 5 *Radio EE 151 | 1 Servomechanisms EE 190 |
| 5 †Elec. Power EE 170 | 3 Transients EE 160 | |
| 5 *Radio EE 150 | 5 General Ethics 150 | |
| 3 *Vector Analysis | 5 A.C. Machines EE 103 | 5 Special Ethics 151 |
| 2 Religion 107 | 5 *High Frequency EE 152 | |

*Communication Majors. †Electric Power Majors.

MECHANICAL ENGINEERING**First Year**

5 Eng. Chem. CH 1	5 Eng. Chem. CH	3 Physics 96
5 Eng. Algebra 7	5 Trigonometry 8	5 Anal. Geometry 9
3 Eng. Drawing ME 1	3 Eng. Drawing ME 2	3 Desc. Geometry ME 3
5 Eng. Comp. 1	2 Eng. Problems CE 1	3 Plane Surveying CE 3
		5 Literature 65

Second Year

5 Eng. Physics 97	5 Eng. Physics 98	5 Fund. EE 10
5 Di. Calculus 101	5 Int. Calculus 102	5 Calculus 103
2 Prod. Processes ME 4	3 Mechanism ME 61	2 Prod. Processes ME 5
5 Logic 1	5 Psychology 1	3 Mechanics CE 71
		3 Philosophy 100

Third Year

5 Fund. EE 11	5 Fund. EE 12	5 Heat & Power ME 104
4 Eng. Thermo. ME 102	4 Eng. Thermo. ME 103	3 St. of Mat. CE 104
2 Prod. Processes ME 6	5 St. of Mat. CE 103	4 Physical Metallurgy
5 Mechanics CE 72	2 Prod. Processes ME 7	ME 120
3 Religion 102	3 Machine Design ME 151	2 Religion 104
		3 Philosophy 101

Fourth Year

3 Heat & Power ME 105	3 Hydrology & Wat.	2 Religion 107
3 Hydraulics CE 106	Power CE 163	5 General Ethics 150
3 Machine Design ME 152	3 Machine Design ME 153	3 Mech. Eng. Lab. ME 172
3 Refrigeration ME 161	3 Prin. of Aerody ME 191	3 Heat & Vent. ME 181
3 Mech. Eng. Lab. ME 171	3 Fuels & Lubricants	2 Spec. & Contracts
3 Religion 165	CH 151	5 Special Ethics 151

SCHOOL OF NURSING

Rev. Gerald R. Beezer, S.J., Regent

Nazleh E. Vizetelly, M.A., Director

Statement

The aim of the School of Nursing is not only to prepare students scientifically and professionally for the efficient discharge of their duties as a nurse but also to assist them through the study of the liberal arts and the learning of religious principles to become truly cultured women of Christian virtue.

Bachelor of Science in Nursing

Recent years have witnessed a steadily increasing demand for nurses with broad educational background and advanced professional preparation. Aware of this need, Seattle College offers a full 4½ year program of nursing education leading to work on the college campus and 12 quarters at the Providence Division.

PRE-NURSING CURRICULUM (May be taken at Seattle College or in any other accredited college or junior college.)

First Quarter

5 Sociology 1	3 Apologetics	5 Elective
5 Chemistry 2		

Second Quarter

5 Sociology 5	5 Chemistry 12	5 Composition 1
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Third Quarter

5 Anatomy 100	5 Composition 2	5 Logic 1
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Fourth Quarter

5 Literature 65	5 Physiology 53	2 Religion 107
5 Psychology 1		

Fifth Quarter

5 Ethics 150	5 History 2	5 Physiology 54
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Sixth Quarter

5 Nutrition 9	5 Physics 95	5 Ethics 151
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PROFESSIONAL NURSING CURRICULUM (This section of the curriculum must be taken at Seattle College School of Nursing.) Students transferring from another college or junior college will be required to take twenty hours at Seattle College if they have already completed courses (*).

First Quarter

5 *Bacteriology 101	2 Pharmacy 51	3 Nursing 120
5 *Home Economics 105		

Second Quarter

5 *Sociology 160 (or Soc. 163 and Soc. 166)	5 *Psychiatry 170	3 Nursing 122
	2 Nursing 121	

Third Quarter

5 Nursing 124	3 Nursing 128	2 Religion 110
3 Pharmacy 61		

	Fourth Quarter	
5 Nursing 125	3 Nursing 130	6 Nursing 129
	Fifth Quarter	
5 Nursing 126	3 Nursing 132	
	Sixth Quarter	
2 Nursing 137	6 Nursing 133	3 Religion 165
	Seventh Quarter	
5 Nursing 141	3 Nursing 1	6 Nursing 142
	Eighth Quarter	
5 *Nursing 147	6 *Nursing 148	
	Ninth Quarter	
5 *Nursing 139	6 *Nursing 140	
	Tenth Quarter	
3 *Nursing 145	3 *Nursing 146	
	Eleventh Quarter	
3 Nursing 138	6 Nursing 153	2 Religion 104
	Twelfth Quarter	
5 Nursing 156	6 Nursing 157	

*Affiliations at University of Washington.

SCHOOL OF NURSING

BACHELOR OF SCIENCE IN NURSING EDUCATION (Open to graduate registered nurses)

	Credits		Credits
Composition * 1	5	Ward Adminis. & Clinical Tchg.*	
Composition 2	5	156	5
Literature 65	5	Princ. & Methods of Teaching * 150	5
History 2	5	Princ. of Guidance in S of N * 191..	3
Speech 40	5	Princ. & Methods of Supervision *	
Sociology * 1	5	152	5
Sociology * 5	5	Tests & Measurements 177.....	3
Sociology 160	5	Ed. Statistics 155.....	5
(or Pop. Trends 163, and Race		Intro. to P.H. Nursing * 137.....	2
and Nationality 166)		Princ. Public Health N. 167.....	3
Logic * 1	5	Field Experience * 154.....	6
Ethics 150	5	Seminar in Teaching * 155.....	3
Ethics 151	5	Religion	
Educational Psychology * 50	5	Apologetics 102	3
Psychology 175	5	Redemption 107	2
Psychiatry 170	5	Sacraments 110	2
Philo. of Education * 194.....	3	Moral Guidance 165.....	3
Science		Creation 104	2
Chemistry 7	5	Electives (approved by adviser.....)	7-12
Physiology 7	5	School of Nursing 40-45 credits.	
Bacteriology 101	5		

*Required for Certificate in Supervision (open to graduate registered nurses.)

AFFILIATED SCHOOLS

Seattle College maintains educational relationships with a number of schools of nursing which offer a three-year course leading to a diploma in nursing. These relationships are either through course affiliation or school affiliation.

In the former relationship, the school of nursing entrusts to the College faculty the responsibility of teaching one or more subjects. College credit is granted for this work.

Under the relationship of school affiliation, the College accepts students for advanced standing from an affiliated school and grants them under stated conditions, a stipulated number of college credits toward the professional degree for the entire curriculum of the school.

The schools of nursing which have affiliation with Seattle College are the following:

School Affiliation

Columbus Hospital School of Nursing, Seattle, Washington
Providence Hospital School of Nursing, Seattle, Washington
St. Joseph's Hospital School of Nursing, Tacoma, Washington
Virginia Mason Hospital School of Nursing, Seattle, Washington

Course Affiliation

Providence Hospital School of Nursing, Everett, Washington
Sacred Heart Hospital, Eugene, Oregon
St. Anthony's Hospital School of Nursing, Wenatchee, Washington
St. Elizabeth's Hospital School of Nursing, Yakima, Washington
St. Joseph's Hospital School of Nursing, Bellingham, Washington
St. Joseph's Hospital School of Nursing, Victoria, B. C.
St. Paul's Hospital School of Nursing, Vancouver, B. C.

Application

Applications for admission to the school of nursing in any of the affiliated hospitals may be addressed directly to the Director of Nursing Education in these hospitals: or to the Director of the School of Nursing at Seattle College specifying which school the applicant wishes to attend.

DEGREE FOR GRADUATE NURSES

(Open to graduate registered nurses)

Seattle College offers a combined academic and advanced professional curriculum leading to the degree of Bachelor of Science in Nursing Education. The R.N. diploma is evaluated and credit is given towards the professional degree of Bachelor of Science in Nursing Education. Courses in the natural and social sciences and nursing education are required to complete the 180 quarter hours necessary for graduation.

PROFESSIONAL REQUIREMENTS FOR ADMISSION

Graduate nurses applying for admission to the advanced professional curriculum must meet the requirements outlined on pages 13-14 in addition to the following:

1. Graduation from a school of nursing of approved standards.
2. Recommendation for teaching, supervision or administration by a Director of a school of nursing by whom the nurse has been employed.
3. Registration as a graduate nurse in one or more states.
4. Sound physical health evidenced by a report showing a complete examination within six months of entrance.

BACHELOR OF SCIENCE in MEDICAL TECHNOLOGY

First Year

5 Chemistry 1	5 Chemistry 2	5 Chem. Qual. 23
5 Sociology 7	5 Composition 1	5 Chemistry 137
5 Anatomy Bl. 100	5 Physics 95	5 Psychology 1
3 Apologetics 102*		

Second Year

5 Zoology Bl. 3	5 Zoology Bl. 4	5 Physiology Bl. 7
5 Bacteriology Bl. 101	5 Bacteriology Bl. 120	5 Bacteriology Bl. 102
5 Literature 64	5 Composition 2	5 Elective
3 Moral Guidance 165*		

Third Year

5 General Ethics Pl. 150	5 Special Ethics Pl. 151	5 French or German 3
5 Chem. Quant. 111	5 French or German 2 or 4	3 Histology
5 French or German 1 or 3†	5 Elective (5 hrs)	5 Biochemistry 160
	4 Religion 107, 110*	2 Elective

Fourth Year—Hospital 45 Credits

BACHELOR OF SCIENCE in DIETETICS

The completion of a Bachelor's Degree from an accredited college or university with a Major in Foods and Nutrition or Institutional Management, followed by the successful completion of Dietetic Internship approved by the American Dietetic Association is prerequisite for membership in the association.

First Year

5 Chemistry 1	5 Chemistry 2	5 Chem. Qual. 23
5 Composition 1	5 Food Preparation 10	5 Soc. Problems 7
5 History 2	5 Composition 2	5 Food Preparation 11
3 Apologetics 102*		

Second Year

5 Chem. Organic 137	5 Anatomy 100	5 Bio-Chem. 160
5 Bact. Bl. 101	5 Nutrition 9	5 Physiology Bl. 7
5 Logic Pl. 1	5 Ed. Psych. Ed. 50	5 Economics 3
3 Moral Guidance 165*		

Third Year

5 Diet Therapy 105	3 Household Adm. 166	3 Nutrition of Children 130
5 Accounting 30	5 Accounting 31	2 Meal Planning and Service 140
5 Literature	5 Ed. Principles 145	5 Elective
4 or 2 Religion*	2 Food Econ. 23	

Fourth Year

3 Institutional Marketing 150	5 Elective	5 Experimental Cookery 170
2 Institutional Management 155	5 Quantity Cookery 160	4 Practice Management 144
5 General Ethics Pl. 150	5 Special Ethics Pl. 151	5 Experimental Cookery 170
4 Instit. Equipment 145	2 Readings in Nutrition 147	
	2 or 4 Religion*	

† Two units in high school language satisfy the language requirement.

*Non-Catholics substitute electives for religion.

NIGHT SCHOOL

Every quarter, with the exception of the Summer session, Seattle College offers a program of night classes in regular college subjects for which credit may be earned and applied toward a bachelors' degree. These courses are of the same quality as the parallel courses taught during the day sessions of the College.

Labor-Management Forum. Meets bi-weekly. Speakers are presented from fields of Labor, Business, and Government. The Labor-Management Forum presents an opportunity for students, to participate in open discussions on Labor-Management problems. Students majoring in Labor are requested to attend.

Aviation Training Program

An aviation training program which meets all military and civilian requirements is offered during a twelve week period. The private pilots and instructor's curricula cover, Civil Air Regulation, Air Navigation, Meteorology, General Service of Aircraft. The Commercial pilot's examination includes the subject of engines. Instruction consists of lectures and recitation with problems being worked in class with adequate personal supervision. Extensive use is made of charts, model airplanes, instrument boards, slide and motion picture films, etc. Maps, globes and models are a feature of the navigation course. A total of 50 slide films are on file for aviation training and many of these are Army and Navy official training films. All examinations are of the multiple choice type as used entirely by the CAA. All these courses are taught by qualified CAA instructors. Upon completion of the program a certificate is issued and three college credits are allowed.

Private Pilot

The class meets twice a week for three hours each evening for three months.

Civil Air Regulations.....	12 Hrs.
Air Navigation	21 Hrs.
Meteorology	21 Hrs.
General Service of Aircraft.....	18 Hrs.
Total	72 Hrs.

Instructor

The class meets three times a week.

Civil Air Regulations.....	15 Hrs.
Air Navigation	33 Hrs.
Meteorology	30 Hrs.
Aircraft	27 Hrs.
Total	105 Hrs.

Commercial

Instructors course plus 15 hours on engines.

SUMMER SESSION

A regular quarter with a complete schedule of courses is offered during the summer months. This program shall be continued in the post-war period to enable war veterans to accelerate their education.

THE GRADUATE SCHOOL

Rev. A. B. Corrigan, S. J., Dean

Graduate Council: A. B. Corrigan, S. J., Chairman; Gerald R. Beezer, S. J., Vincent M. Conway, S. J.; Francis J. McGarrigle, S. J.; James B. McGoldrick, S. J.

A program of graduate studies directed toward the Master's Degree in Arts and Sciences was inaugurated at Seattle College in 1901. Graduate work is limited to the Master's Degree and graduate courses are given primarily during the Summer Quarter.

Admission

1. Admission to the Graduate School is granted to applicants who have received the Bachelor's Degree from an approved college or professional school, and whose scholarship records and credentials indicate ability to pursue graduate work of high quality.

2. The Graduate Council admits students to graduate work and approves their program of study submitted by their mentor.

3. An undergraduate major is required in the same department from which a candidate selects his graduate major and an undergraduate minor, for his graduate minor.

REQUIREMENTS FOR MASTER'S DEGREE

1. Each candidate shall complete 45 quarter hours of credit at Seattle College beyond that required for a Bachelor's Degree. This work must be of distinctly advanced character but, with the approval of the department and the Dean of the Graduate School, 12 credits may be earned in courses numbered 100 to 199, if the subjects be suitable to the student's program. A maximum of 6 credits may be transferred from another institution if they are earned with a grade of A or B and approved by the Graduate Council.

2. At least 24 quarter hours of credit is to be taken in the major field and not less than 12 hours in the minor field. Upon the recommendation of the major department and approval of the Dean of the Graduate School, all course work may be concentrated in the major field of study.

3. The work done in undergraduate courses for graduate credit must have at least a B grade. Graduate courses, numbered over 200, must have at least a C grade. All the work done towards a Master's Degree must have a B average.

4. Every candidate for a Master's Degree must take a comprehensive examination embracing both the major and minor fields of study. This examination shall be written and/or oral at the judgment of the department and the approval of the Dean of the Graduate School. The examination in the minor field will cover the more significant phases of the particular subjects taken. This matter will be based on a list of readings assigned by the department.

5. (a) The student must complete a thesis on a topic approved by both his major department and the Dean of the Graduate School. For this work 9 quarter hours of credit are granted. The thesis is not necessarily a work of original research but it must, however, demonstrate the candidate's ability to collect facts, interpret them in a critical manner and organize and express them in an original lucid way.

(b) The topic of the thesis is to be approved by the student's mentor and filed in the office of the Dean at the beginning of the last quarter of regular course work.

(c) Two copies of the approved thesis are to be filed in the office of the Dean two weeks before the date of graduation.

(d) An oral examination on the content of the thesis, cognate literature and available source material is held before a board appointed by the Dean of the Graduate School.

6. The course work for the Master's Degree must be completed within five years (6 consecutive Summer Sessions) after the work for the degree has been started. The comprehensive examination, the thesis and the thesis examination must be completed within one year after the course of studies is finished.

7. Each candidate for a degree will give evidence of a reading knowledge of a modern foreign language specified by the director before one half of the required graduate credits for the degree are completed.

8. Students lacking a background in Scholastic Philosophy shall be required to take at least a survey course.

9. Candidates for a degree are required to make application for it on the form supplied by the Graduate School office. This form, filled out, should be returned to the office not later than May 1, preceding the June in which the degree is expected.

10. The Graduate Council alone has the power to recommend a candidate to the Executive Board for a Master's Degree.

11. All candidates for degrees must be present at the Commencement Exercises to receive their diplomas.

SUMMARY

1. 45 credits required for graduation
 - 9 credits granted for the thesis
 - 36 credits granted for course work
 - 24 credits earned in major field
 - 12 credits earned in minor field
2. Reading knowledge in approved modern language.
3. Comprehensive examination in major and minor fields of study.
4. Oral examination on the thesis and its background.

Special Departmental Requirements

EDUCATION—Each candidate should specialize in at least two from the following fields: educational psychology, educational administration and supervision, secondary education, history and philosophy of education and comparative education, curriculum, guidance and extra-curricular activities.

ENGLISH—Candidates for a Master's degree with a major in English are required to take the English senior examination, in addition to the comprehensive examination in graduate course work. It consists of an objective examination in the general field of English, and an essay examination on two special fields in English which will test the candidate's ability to write logically organized and stylistically effective papers.

HISTORY—A special field of interest must be selected at registration or soon thereafter with the advice of the director of the department. The special fields of interest are the following:

1. The Ancient World
2. The Medieval Europe
3. Modern Europe
4. America

No courses outside the field of genetic history will be credited to a degree. The comprehensive examination shall be written and will consist of two parts:

- a. the entire special field of interest
- b. the more significant phases of other fields based on a list of readings assigned by the department.

COURSES OF INSTRUCTION

Lower division courses, numbered 1 to 99, are elementary and background courses. They are open to freshmen and sophomores who have the necessary preparation.

Upper division courses, numbered 100 to 199, are advanced subjects which are not ordinarily open to freshmen and sophomores.

Courses numbered 200 and above are open only to graduate students.

BIOLOGY (B1)

Dr. Helen Werby, Head

Degree in Biology: 40 hours—3, 4, 5 or 7, 101, choose 20 hours with the advice of the director from the following: 100, 102, 103, 105, 120, 127, 128.

Undergraduate Major: The biology requirements are the same as for the degree in biology.

Related Minor: Chemistry 1, 2, (or 21 & 22), 23, 131, 132, 111 or 160.

Undergraduate Minor: 25 hours—3, 4, 5 or 7, and 10 hours to be chosen from 100, 101, 102, 103, 105, 120, 127, 128.

Anatomy

100. ANATOMY, General, survey course, primarily for nurses, open to others 5 Cr.
105. ANATOMY, Microscopic—Histology, Prerequisites, Zool. 3 or Physiol. 7. For lab technicians..... 3-5 Cr.

Bacteriology

101. BACTERIOLOGY, General, survey course. Prerequisites, Chem. 1 or 21, and Zool. 3 or Physiol. 7..... 5 Cr.
102. BACTERIOLOGY, Clinical Methods. Prerequisites, Bact. 101, Chem. 23, 111, and 132. For laboratory technicians or with permission of instructor 5 Cr.
103. BACTERIOLOGY, Public Hygiene. Course does not count towards bacteriology credit 5 Cr.
120. BACTERIOLOGY, Applied. Media room. Prerequisites, permission of instructor. For laboratory technicians..... 5 Cr.

Physiology

7. PHYSIOLOGY, Elementary, survey course. Prerequisites, Chem. 1, 11, or 21, or permission of instructor..... 5 Cr.
- 53-54. PHYSIOLOGY, Intermediate. Prerequisites, Anat. 100, Chem. 12. Required for majors in nursing education..... 5 Cr.

Zoology

- 3-4. PREMEDICAL ZOOLOGY, elementary course. Required for premedical students 5 Cr.
5. VERTEBRATE ANATOMY. A course in the dissection of a typical mammal, correlated with lectures covering the functions of the various systems and organs. For pre-medical and pre-dental students. Prerequisites: Zoology 3 and 4. Chemistry 131. Spring quarter..... 5 Cr.
100. ELEMENTARY EMBRYOLOGY. Prerequisites Zool. 3 or Physiol. 7 and permission of instructor..... 5 Cr.
127. COMPARATIVE ANATOMY. Prerequisites, Zool. 100 and Physiol. 7 5 Cr.
128. SPECIAL DISSECTION. Prerequisites permission of instructor, Zool. 100, or Zool. 3 and Physiol. 7.....credits to be arranged

CHEMISTRY (Ch)**Rev. Gerald R. Beezer, S.J., Head**

Degree in Chemistry: 55 hours—1, 2, (or 21 & 22), 23, 109, 110, 131, 132, 133, 181, 182, 183.

Undergraduate Major: 40 hours—1, 2, (or 21 & 22), 23, 109, 110, 131, 132, 180.

Related Minor: Mt. 2, 3; Ph. 1, 2, 3.

Undergraduate Minor: 25 hours—1, 2, (or 21 & 22), 23, 131, 132.

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|---|--------|
| 1. GENERAL INORGANIC CHEMISTRY..... | 5 Cr. |
| 2. GENERAL INORGANIC CHEMISTRY. Prerequisite Chem 1.... | 5 Cr. |
| 7. SURVEY COURSE IN GENERAL INORGANIC CHEMISTRY.. | 5 Cr. |
| 11. GENERAL CHEMISTRY. Open to nurses and medical technologists only. High School Chemistry not required..... | 5 Cr. |
| 12. GENERAL CHEMISTRY. Continuation of Chemistry 11..... | 5 Cr. |
| 21. GENERAL INORGANIC CHEMISTRY. Prerequisite, one year high school chemistry..... | 5 Cr. |
| 22. GENERAL INORGANIC CHEMISTRY. Prerequisite Chem. 21.. | 5 Cr. |
| 23. ELEMENTARY QUALITATIVE ANALYSIS..... | 5 Cr. |
| 101. ADVANCED QUALITATIVE ANALYSIS. Prerequisite Chem. 23 | 5 Cr. |
| 109. QUANTITATIVE ANALYSIS. Gravimetric Analysis. Prerequisite Chemistry 23..... | 5 Cr. |
| 110. QUANTITATIVE ANALYSIS. Volumetric Analysis. Prerequisite Chemistry 109..... | 5 Cr. |
| 111. QUANTITATIVE ANALYSIS. Gravimetric and volumetric for students not majoring in Chemistry. Prerequisite Chem. 23.... | 5 Cr. |
| 112. QUANTITATIVE ANALYSIS. A survey of Quantitative Clinical Methods. Pr. Chem. 23..... | 5 Cr. |
| 131. ORGANIC CHEMISTRY. Prerequisite, Chem. 23..... | 5 Cr. |
| 132. ORGANIC CHEMISTRY | 5 Cr. |
| 133. ORGANIC PREPARATIONS. Pr. Chem. 132..... | 5 Cr. |
| 134. ORGANIC QUALITATIVE ANALYSIS. Prerequisite Chem. 23 and 132..... | 5 Cr. |
| 137. ORGANIC CHEMISTRY. A survey course. Prerequisite Chem. 22 | 5 Cr. |
| 160. INTRODUCTION TO PHYSIOLOGICAL CHEMISTRY. Prerequisite 110, 132..... | 5 Cr. |
| 180. PHYSICAL CHEMISTRY. A survey course..... | 5 Cr. |
| 181-2-3. PHYSICAL AND THEORETICAL CHEMISTRY. Prerequisite one year college physics, Chem. 110, Math. 102 (5 Cr. per Qtr.).. | 15 Cr. |
| 190, 191. HISTORY OF CHEMISTRY | 2 Cr. |

COMMERCE AND FINANCE (CF)**Dr. Paul A. Volpe, Acting Head**

Degree in Commerce and Finance: the required subjects are stated in the program of study for this degree.

Undergraduate Major: 45 hours—1, 2, and 35 hours selected with the direction of the advisor.

Related Minor: to be selected from Groups I or II, cf. p. 16.

Undergraduate Minor: 25 hours—1, 2, and 15 hours selected with the direction of the advisor.

First and Second Year

1-2. PRINCIPLES OF ECONOMICS	5-5 Cr.
3. SURVEY OF ECONOMICS. Condensation of I and II.....	5 Cr.
10-11. BUSINESS LAW	5-5 Cr.
EUROPEAN HISTORY	5 Cr.
30-31. PRINCIPLES OF ACCOUNTING.....	5-5 Cr.
40. BUSINESS MATHEMATICS	5 Cr.
50. STATISTICS. Method and analysis.....	5 Cr.
60. MONEY AND BANKING.....	5 Cr.
65. PRINCIPLES OF ACCT.....	5 Cr.
75. COMPARATIVE BANKING SYSTEMS.....	5 Cr.
80. INTERMEDIATE ACCOUNTING I.....	5 Cr.

Third Year

100. INTERNATIONAL ECON. RELATIONS.....	5 Cr.
105. LABOR PROBLEMS	5 Cr.
AMERICAN HISTORY	5 Cr.
115. MARKETING AND ADVERTISING.....	5 Cr.
117. ELEMENTS OF CORPORATION FINANCE.....	5 Cr.
120. INVESTMENTS AND SECURITY ANALYSIS.....	5 Cr.
122. PRINCIPLES OF TRANSPORTATION.....	5 Cr.
125. PRINCIPLES OF FOREIGN TRADE.....	5 Cr.
129. INTERMEDIATE ACCOUNTING II.....	5 Cr.
130. COST ACCOUNTING	5 Cr.
131. AUDITING	5 Cr.
135. LABOR LAW AND RELATIONS.....	5 Cr.
136. HISTORY OF LABOR IN THE U. S.....	5 Cr.

Fourth Year

150. PUBLIC FINANCE AND TAXATION.....	5 Cr.
155. HISTORY OF ECONOMIC THOUGHT.....	5 Cr.
160. BUSINESS CYCLES	5 Cr.
165. ADVANCE MONEY CREDIT AND BANKING.....	5 Cr.
170. GOVERNMENT AND BUSINESS.....	5 Cr.
175. PERSONNEL ADMINISTRATION	5 Cr.
185. TAX ACCOUNTING	5 Cr.
186. ADVANCED ACCOUNTING, C.P.A. PROBLEMS I.....	5 Cr.
187. ADVANCED ACCOUNTING, C.P.A. PROBLEMS II.....	5 Cr.
190. COLLECTIVE BARGAINING IN THE U. S. AND ABROAD.....	5 Cr.
195. ADVANCED FOREIGN TRADE.....	5 Cr.
196. COMMERCE ON THE PACIFIC.....	5 Cr.
197. SEMINAR IN COMMERCE AND FINANCE.....	5 Cr.

DIETETICS (Dt)

Degree in Dietetics: the required subjects are outlined in the program of study for this degree.

9. NUTRITION	
10, 11. FOOD PREPARATION. Selection, preparation, service of food..	5 Cr.
30. INTRODUCTION TO NUTRITION.....	5 Cr.

104. NUTRITION AND DIET THERAPY	
105. DIET THERAPY	
110. DIETETICS	5 Cr.
115. DIET IN DISEASE.....	5 Cr.
130. NUTRITION OF CHILDREN.....	3 Cr.
140. MEAL PLANNING AND TABLE SERVICE.....	2 Cr.
150. INSTITUTIONAL MARKETING	3 Cr.
155. INSTITUTION MANAGEMENT PROBLEMS.....	2 Cr.
160. QUANTITY COOKERY AND INSTITUTIONAL EXPERIENCE	5 Cr.
170. EXPERIMENTAL COOKERY	5 Cr.
180. PRACTICE TEACHING IN DIETETICS.....	5 Cr.
190. ADVANCED NUTRITION	5 Cr.

EDUCATION (Ed)

Rev. James B. McGoldrick, S. J., Director

Undergraduate Major: 36 hours—1, 50, 145, 152, 165, 194, additional elective hours in education to complete 36 hours.

Related Minors: Two minors of 18 hours each are required; a Minor in English must be 25 hours.

Undergraduate Minor: 24 hours—50, 145, 152, 165, and additional elective hours in education to complete 24 hours.

1. EDUCATION ORIENTATION	5 Cr.
50. EDUCATIONAL PSYCHOLOGY	5 Cr.
101. WASHINGTON STATE HISTORY AND GOVERNMENT.....	5 Cr.
130. STATE MANUAL	3 Cr.
140. VOCATIONAL EDUCATION	3 Cr.
145. SECONDARY EDUCATION. Principles of.....	3 Cr.
150. EDUCATIONAL PSYCHOLOGY	3 Cr.
152. GENERAL METHODS	3 Cr.
155. EDUCATIONAL STATISTICS	5 Cr.
157. HIGH SCHOOL ORGANIZATION AND ADMINISTRATION..	3 Cr.
160. HISTORY OF EDUCATION.....	5 Cr.
165. SPECIAL METHODS	2 Cr.
167. ADMINISTRATION OF GUIDANCE IN THE SECONDARY SCHOOL	3 Cr.
172. SUPERVISION AND IMPROVEMENT OF INSTRUCTION.....	3 Cr.
175. PSYCHOLOGY OF ADOLESCENCE.....	5 Cr.
177. TESTS AND MEASUREMENTS.....	3 Cr.
180. DIRECTED TEACHING	5 Cr.
185. DIRECTED LEARNING	3 Cr.
190. CURRICULUM MAKING. Technique of.....	5 Cr.
192. EDUCATIONAL RESEARCH	3 Cr.
194. PHILOSOPHY OF EDUCATION.....	3 Cr.
195. MENTAL HYGIENE	5 Cr.
199. SOCIAL ASPECTS OF EDUCATION.....	5 Cr.

Graduate Courses

201. METHODS OF EDUCATIONAL RESEARCH. Required of candidates for Master's Degree in Education.....	5 Cr.
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205. **THE GUIDANCE MOVEMENT AND PROBLEMS OF ADOL-
ESCENCE.** An introductory study of the principles, objectives,
problems, and methods of guidance coupled with a study of
the physical, intellectual, emotional, moral and social charac-
teristics of the adolescents, and the educative activities suited
to the period of secondary school education. Pr. Psychology 1.. 5 Cr.
207. **ADVANCED PSYCHOLOGY OF EDUCATION.** Pr. Psych.
1 and Educational Psych. 50..... 5 Cr.
210. **ADVANCED STATISTICAL METHODS.** Pr. Education 155
required of candidates for the Master's Degree..... 5 Cr.
211. **PHILOSOPHICAL BACKGROUNDS OF EDUCATIONAL
METHODS.** Pr. Education 152 and 165..... 5 Cr.
212. **HIGHER EDUCATION.** Development of higher education in
America. Present movements in the organization and reorgani-
tion of higher education..... 5 Cr.
213. **PROGRESSIVE EDUCATION.** Its history, development and
evaluation 3 Cr.
214. **EDUCATION CLASSICS.** The more important educational
writings of Plato, Locke, Comenius, Rousseau, Pestalozzi, Her-
bart and others..... 5 Cr.
215. **SEMINAR.** Problems of Teaching. Research and investiga-
tional problems in the teaching of the subjects of the secondary
school 3 Cr.
216. **SEMINAR IN HISTORY OF EDUCATION.** Development of
educational theories and practice with special reference to
the civilizations in which they served, and to current trends
in public schools..... 5 Cr.
225. **COMPARATIVE EDUCATION: SEMINAR.** The organization
and administration of education in Great Britain, France,
Germany, and other countries of Europe and the Orient..... 5 Cr.
230. **SEMINAR IN PSYCHOLOGY OF HIGH SCHOOL SUBJECTS** 5 Cr.
240. **SEMINAR IN ADMINISTRATION AND SUPERVISION**..... 5 Cr.
245. **RECONSTRUCTION IN EDUCATION.** Survey of Educational
trends in the program of education..... 5 Cr.
260. **SEMINAR IN SECONDARY EDUCATION.** Pr. Education 145.... 5 Cr.
270. **PROBLEMS IN MODERN METHODS.** Pr. Education 152..... 5 Cr.
277. **ADVANCED TESTS AND MEASUREMENTS,** Pr. Ed. 177..... 3 Cr.
280. **PHILOSOPHY OF EDUCATION**..... 5 Cr.

ENGINEERING (Eng)

Rev. Edmund B. McNulty, S. J., Director

Aeronautical

100. **AERONAUTICAL METEOROLOGY AND NAVIGATION.** A
study of the atmosphere in relation to temperature, pressure,
moisture, velocity, cloud formations, cyclones and weather
forecasting. A consideration of charts, maps, bearings, direc-
tions, compass error and navigation problems. Three hours
lecture per week..... 3 Cr.
101. **AERODYNAMICS.** A study of ideal fluids, of potential flow, of
airfoil of infinite and finite lengths and of airfoil combinations.
Boundary layer phenomena, propeller theory and performance,
and stability characteristics are also considered. Three hours
lecture per week..... 3 Cr.
102. **AERODYNAMICS.** A continuation of 101. Three hours lecture
per week 3 Cr.

103. **ADVANCED AERODYNAMICS.** A continuation of 102. Three hours lecture per week..... 3 Cr.
111. **AIRPLANE DESIGN.** An investigation of the design of past and present airplanes with particular reference to the preparation of the balance diagram, preliminary layout, control system, rib design and design computations for satisfactory stability, control and performance. Three hours lecture and four hours of drafting per week..... 3 Cr.
112. **ADVANCED AIRPLANE DESIGN.** A continuation of 111. Two hours lecture and eight hours drafting per week..... 4 Cr.
141. **AERIAL PROPULSION.** A study of methods of screw propeller design, design of a standard screw propeller and performance calculations. Two hours lecture and four hours drafting per week 3 Cr.
151. **AIRCRAFT MOTOR AND PLANE MAINTENANCE.** Shop-work and lectures on the materials used in aircraft construction including principles of motor maintenance, methods of lubrications and an elementary study of various aircraft types, parts and designs. One hour lecture and six hours laboratory per week..... 3 Cr.
- 171-2. **AIRCRAFT MECHANICS.** A study of analytical and graphical methods of stress analysis as applied to the airplane for different flight and landing conditions as well as the study of the detail design and stress analysis of the component parts of the airplane. Three hours lecture and four hours drafting per week 3 Cr.
173. **ADVANCED AIRCRAFT MECHANICS.** A continuation of 172. Three hours lecture and four hours of drafting per week..... 3 Cr.
191. **RADIO CONTROL AND AIRCRAFT INSTRUMENTS.** Study of principles of radio communications used as an aid to flight control and of those instruments used in the field of Aero nautics. Three hours lecture and six hours laboratory per week 5 Cr.

Chemical

21. **GENERAL CHEMISTRY.** Gas laws, stoichiometry, equilibria, ionization, electrolysis, periodic system..... 5 Cr.
22. **GENERAL CHEMISTRY.** Continuation of Ch. 21. A brief study of the important elements and their compounds..... 5 Cr.
23. **QUALITATIVE ANALYSIS.** A systematic identification of the important elements and inorganic radicals. Semi-micro methods are employed throughout..... 5 Cr.
109. **QUANTITATIVE ANALYSIS.** Gravimetric. The use of the analytical balance, calibration of weights. Typical gravimetric procedures 5 Cr.
110. **QUANTITATIVE ANALYSIS.** Volumetric. Course 109 prerequisite. Acid-base titrations, Oxidation-Reduction processes, Precipitation methods 5 Cr.
131. **ORGANIC CHEMISTRY.** Aliphatic compounds through the carbohydrates; a study of their preparation, properties and reactions; the alicyclic compounds..... 5 Cr.
132. **ORGANIC CHEMISTRY.** A continuation of Ch. 131. The aromatic and heterocyclic compounds..... 5 Cr.
141. **CHEMICAL ENGINEERING.** Thermal properties of matter and the energy relationships underlying mechanical and chemical processes, including discussion of the first law of thermodynamics as applied to both batch and flow processes, and such operations as combustion, compression and handling of fluids, thermal control of chemical reactions, and the like. Development of second laws and its elementary applications..... 3 Cr.

142. **CHEMICAL ENGINEERING.** Quantitative engineering applications of the second law, including heat engines, heat recovery, particularly in chemical operations, thermal level of heat in relation to industrial processes, chemical equilibria and thermodynamic efficiency of chemical processes. Attention to high pressure operations, particularly the influence of pressure on thermal effects and chemical equilibrium..... 5 Cr.
143. **CHEMICAL ENGINEERING.** Basic principles underlying the unit operations of chemical industry. Discussion of fundamental problems in flow of heat. Analysis of the operation of evaporation, distillation, drying, humidification, filtration, subdivision of solids, hydraulic classification and similar topics. Emphasis on quantitative relationships illustrated by the solution of numerous problems..... 5 Cr.
144. **ANALYTICAL TREATMENT OF CHEMICAL ENGINEERING PROCESSES.** Conservation of matter and energy, the laws of equilibrium, and reaction rate. Problems of diffusion requiring certain mathematical techniques. Training in setting up ordinary and partial differential equations corresponding to specific physical situations, and presenting methods available for their solution, including various graphical constructions 5 Cr.
151. **FUELS AND LUBRICANTS.** Analysis of coal, heating values of solid, liquid and gaseous fuels. Two hours lecture, and four hours of laboratory a week..... 3 Cr.
181. **PHYSICAL AND THEORETICAL CHEMISTRY.** Prerequisite one year college physics, Chem. 110, and Math. 102..... 5 Cr.
182. **PHYSICAL AND THEORETICAL CHEMISTRY.** Continuation of Ch. 181..... 5 Cr.
183. **PHYSICAL AND THEORETICAL CHEMISTRY.** Continuation of Ch. 182..... 5 Cr.

Civil

1. **ENGINEERING PROBLEMS.** Training in methods of attacking, analyzing, and solving engineering problems. Deals principally with problems in dynamics, elementary, mechanics, statics and graphics. Ten hours a week..... 5 Cr.
3. **PLANE SURVEYING.** An introduction to surveying instruments and their use. Theory and methods of chaining, leveling and traversing office computations, and methods of plotting controls. One hour lecture, six hours laboratory a week..... 3 Cr.
4. **LAND SURVEYING.** U. S. Public Land Surveys, Rural and Urban surveying. Theory and applications of the stadia. One hour lecture and six hours laboratory a week..... 3 Cr.
5. **ADVANCED SURVEYING.** Topographic surveying and mapping. Triangulation and base-line measurements. Meridian and latitude determination by observation on the sun, and pole star. One hour lecture, six hours laboratory a week..... 3 Cr.
5. **ROUTE SURVEYING.** Emphasis is placed on highway surveying. Object and methods of the preliminary, location and construction surveys. Measurement and computation of earthwork and the use of the mass-diagram, simple, compound, reverse and transition curves. One hour lecture, six hours laboratory a week..... 3 Cr.
71. **MECHANICS.** The principles of statics, kinematics and

- kinetics including a study of equilibrium of force systems, moment of inertia, linear and angular motions. Three hours lecture a week..... 3 Cr.
72. MECHANICS. A continuation of CE 71. Three hours lecture a week..... 3 Cr.
103. STRENGTH OF MATERIALS. Simple tension, compression and shear stress as applied to thin wall cylinders, simple machine parts and riveted joints. A correlation of load, moment, stress and deflection conditions in beams as used for purposes of design. The bases and application of column formula and the determination of stresses in shafting due to simple twist and the combined action of twisting and axial loads. Five hours lecture a week..... 5 Cr.
104. STRENGTH OF MATERIALS. A determination of the physical properties of wood, steel, cast iron, and aluminum from tension, compression, bending and shear tests. Standard tests are given to sand, gravel and Portland Cement. Nine hours laboratory a week..... 3 Cr.
106. HYDRAULICS. Hydrostatics and hydrokinetics of water; fluid pressure on dams, gates and retaining wall; the flow of water through orifices, tubes, pipes and open channels, turbines and pumps are studied. Four hours lecture and three hours laboratory a week..... 3 Cr.
110. STRUCTURAL ANALYSIS. Lectures and design laboratory treating statically determinate structures such as roofs and bridges. The work includes a consideration of loads, reactions, moments and stresses. Algebraic and graphic methods are used. Four hours lecture and four hours laboratory a week.... 5 Cr.
111. STRUCTURAL ANALYSIS. A continuation of CE 110. Three hours lecture and four hours laboratory a week..... 4 Cr.
112. STRUCTURAL DESIGN. Analysis and design of a wide variety of types of structure, involving simple tension and compression members, columns, pin and riveted joints, and plate girders. Three hours lecture and four hours laboratory a week..... 4 Cr.
161. REINFORCED CONCRETE. The design of simple reinforced concrete beams, slabs, columns and footings. Design of concrete mixes together with methods of estimating volumes and cost of reinforced concrete structures. Two hours lecture and six hours laboratory a week..... 5 Cr.
162. REINFORCED CONCRETE. Design of concrete and masonry structures, including foundations, dams, bridge piers, and buildings. Two hours lecture and six hours laboratory a week..... 4 Cr.
154. HIGHWAY DESIGN. Design, construction and maintenance of roads and pavements. Alignment, grade and drainage of roads. Gravel, stone, concrete, block and sheet gravel types. Four hours lecture and three hours laboratory a week..... 4 Cr.
163. HYDROLOGY AND WATER POWER. A study of rainfall and stream flow in relation to water power. Characteristics of the various types of hydraulic machines. Three hours lecture a week..... 3 Cr.
171. WATER SUPPLY AND SEWERAGE. Study of water requirements of municipal systems including quantity, quality of source as well as distribution methods. Design of purification and disposal plants and principles of sewer construction. Three hours lecture a week..... 3 Cr.

173. **SANITARY ENGINEERING.** Sewage treatment. Composition and properties dilution, screening and sedimentation, septicization, contact bed trickling filter, activated sludge. Two hours lecture, six hours laboratory a week..... 4 Cr.
181. **STATICALLY INDETERMINATE STRUCTURES.** Analysis of statically indeterminate structures. Five hours lecture..... 5 Cr.
190. **AIRPORT DESIGN.** Design of landing fields. Three hours lecture a week..... 3 Cr.

Electrical

10. **FUNDAMENTALS OF ELECTRICAL ENGINEERING.** A study of direct current circuits with emphasis on Ohm's Law, Kirchoff's Law, the magnetic circuit and electrical fields. Four hours lecture and four hours laboratory a week..... 5 Cr.
11. **FUNDAMENTALS OF ELECTRICAL ENGINEERING.** A course covering the theory and application of Alternating Current together with its measurement, for Civil, Mechanical and Electrical Engineers. Four hours lecture and four hours laboratory a week..... 5 Cr.
12. **FUNDAMENTALS OF ELECTRICAL ENGINEERING.** A continuation of EE 11. Four hours lecture and four hours laboratory a week..... 5 Cr.
81. **FUNDAMENTALS OF ELECTRICAL ENGINEERING.** A thorough course in singlephase and polyphase alternating current circuits for Electrical Engineering students. Four hours lecture and four hours laboratory a week..... 5 Cr.
82. **FUNDAMENTALS OF ELECTRICAL ENGINEERING.** A continuation of EE 81. Four hours lecture and four hours laboratory a week..... 5 Cr.
83. **FUNDAMENTALS OF ELECTRICAL ENGINEERING.** A continuation of EE 82. Four hours lecture and four hours laboratory a week..... 5 Cr.
91. **ELECTRONICS.** A study of the theory and characteristics of vacuum tubes and their use in A.F. and R.F. circuits. Three hours lecture and four hours laboratory a week..... 3 Cr.
92. **ELECTRONICS.** A continuation of EE 91. Three hours lecture and four hours laboratory a week..... 3 Cr.
93. **ELECTRONICS.** A study of gas-filled and light-sensitive tubes and their circuits. Three hours lecture and four hours laboratory a week..... 3 Cr.
95. **COMMUNICATION.** Network theorems, filters, transmission lines and their applications to communication circuits. Two hours lecture and four hours laboratory a week..... 3 Cr.
96. **COMMUNICATION.** A continuation of EE 95. Two hours lecture and four hours laboratory a week..... 3 Cr.
97. **COMMUNICATION.** A continuation of EE 96. Two hours lecture and four hours laboratory a week..... 3 Cr.
98. **COMMUNICATION.** A continuation of EE 97. Two hours lecture and four hours laboratory a week..... 3 Cr.
101. **DIRECT CURRENT MACHINERY.** A study of the theory of D.C. Machines; commutation, windings, armature E.M.F., voltage and speed regulation of dynamos, three wire generators, balancers, boosters and motor control. Four hours lecture and four hours laboratory a week..... 5 Cr.

102. ALTERNATING CURRENT MACHINES. A study of the principles and characteristics of induction motors, alternators, synchronous motors and synchronous converters. Four hours lecture and four hours laboratory a week..... 5 Cr.
103. ALTERNATING CURRENT MACHINES. A continuation of EE 102. Four hours lecture and four hours laboratory a week 5 Cr.
150. RADIO. A thorough study of modulating and demodulating circuits, of oscillators and antennae, and their application to receivers and transmitters. Four hours lecture and four hours laboratory a week..... 5 Cr.
151. RADIO. A continuation of EE 150. Four hours lecture and four hours laboratory a week..... 5 Cr.
152. HIGH FREQUENCIES. Generation and transmission of ultra and super high frequencies. Four hours lecture and four hours laboratory a week..... 5 Cr.
160. TRANSIENTS. A thorough study of electrical transients in electrical circuits with lump and distributed constants. Three hours lecture and four hours laboratory a week..... 3 Cr.
161. TRANSIENTS. A continuation of EE 160. Three hours lecture and four hours laboratory a week..... 3 Cr.
170. ELECTRICAL POWER CIRCUITS. A theory of symmetrical components and application to electrical power systems, and operation under unbalanced conditions. Theory of equivalent circuits with application to component parts of power networks. Four hours lecture and four hours laboratory a week 5 Cr.
171. ELECTRIC POWER GENERATION. The technique of electric power generation. Four hours lecture and four hours laboratory a week..... 5 Cr.
180. ELECTRICAL MACHINE DESIGN. Factors governing the design of electrical machinery and the application to a given machine. Six hours laboratory a week..... 5 Cr.
190. SERVOMECHANISMS. The study of the principles of close-cycle automatic control systems with emphasis on transient response. One hour lecture and two hours laboratory a week 1 Cr.

Mechanical

1. ENGINEERING DRAWING. Lettering, use and care of instruments; orthographic projection, isometric, oblique and perspective projection, technical sketching, screw threads, sectioning, dimensioning and tracing. Nine hours laboratory a week 3 Cr.
2. ENGINEERING DRAWING. A continuation of M.E. 1. Nine hours laboratory a week..... 3 Cr.
3. DESCRIPTIVE GEOMETRY. The theory of projection and its application to engineering problems. Six hours of lecture and laboratory a week..... 3 Cr.
4. PRODUCTION PROCESS. A study of processing of industrial metals, including casting, working, welding, machine and heat treatment. One hour lecture and four hours laboratory a week 2 Cr.
5. PRODUCTION PROCESSES. A continuation of M.E. 4. One hour lecture and four hours laboratory a week..... 2 Cr.
6. PRODUCTION PROCESSES. A continuation of M.E. 5. One hour lecture and four hours laboratory a week..... 2 Cr.

7. PRODUCTION PROCESSES. A continuation of M.E. 6. One hour lecture and four hours laboratory a week..... 2 Cr.
61. MECHANISM. Kinematics of machines; linkage, cams, pulleys and belts, gears and gear teeth. Four hours lecture a week.... 3 Cr.
102. ENGINEERING THERMODYNAMICS. An introductory course in the fundamentals of thermodynamics. Four hours lecture a week..... 4 Cr.
103. ENGINEERING THERMODYNAMICS. A continuation of M.E. 102. Four hours lecture a week..... 4 Cr.
104. HEAT AND POWER. A study of Reciprocating engines and turbines as well as gasoline and diesel engines. Four hours lecture and four hours laboratory a week..... 5 Cr.
105. HEAT AND POWER. A continuation of M.E. 105. Four hours lecture and four hours laboratory a week..... 3 Cr.
110. HEAT AND POWER ENGINEERING. A general course for Civil, Chemical and Electrical Engineering Students. Topics considered are the general energy equation, the various heat cycles; fuels and combustion, and power plant with its equipment. Five hours lecture a week..... 5 Cr.
120. PHYSICAL METALLURGY. A study of the crystal structure and phase diagram of metals as a means of understanding the constitution, micro-structure, workability, heat treatment and physical properties of metals and alloys. Three hours lecture and four hours laboratory a week..... 4 Cr.
151. MACHINE DESIGN. Determination of stresses and deformations in shafting, hollow cylinders, press fits, gears and springs. The application of the principles to the design, layout and details of specific machines. One hour lecture and six hours laboratory a week..... 3 Cr.
152. MACHINE DESIGN. A continuation of M.E. 151. One hour lecture and six hours laboratory a week..... 3 Cr.
153. MACHINE DESIGN. A continuation of M.E. 152. One hour lecture and six hours laboratory a week..... 3 Cr.
161. REFRIGERATION. Operation of various types of compressors, evaporators, condensers, and automatic controls used in commercial refrigeration systems. Two hours lecture and four hours laboratory a week..... 3 Cr.
171. MECHANICAL ENGINEERING LABORATORY. A continuation of M.E. 7. One hour lecture and six hours laboratory a week 3 Cr.
172. MECHANICAL ENGINEERING LABORATORY. A continuation of M.E. 171. One hour lecture and six hours laboratory a week 3 Cr.
181. HEAT AND VENTILATION. A study of various systems of heating and ventilating. Three hours lecture a week..... 3 Cr.
191. PRINCIPLES OF AERODYNAMICS. A study of ideal fluids, of potential flow, or airfoils, of infinite and finite lengths and airfoil combinations. Boundary layer phenomena, propeller theory and performance and stability characteristics are also considered. Three hours lecture a week..... 3 Cr.

ENGLISH (En)

Rev. Robert J. Carmody, S. J., Head

Undergraduate Major: 45 hours—Prerequisite, Composition 1, 2; Required 64, 65, 75, 103, 107, and 20 additional hours in upper division work.

Related Minor: to be selected from Groups I or II or Mt. in Groups III, cf. p. 16.

Undergraduate Minor: 25 hours—Prerequisite, Composition 1, 2; Required 64, 65 and 15 hours in upper division work.

1. COMPOSITION. General review of the mechanics of writing. Training in the correct and effective use of the English language. A thorough study of exposition..... 5 Cr.
2. COMPOSITION. A continuation of Composition 1. A study of and practice in the remaining forms of prose discourse—description, narration and argumentation..... 5 Cr.
15. COMPOSITION. For students ranking very high in the freshman preliminary test as a substitute for Comp 1 and 2..... 5 Cr.
64. LITERARY BACKGROUNDS. Survey course in English Literature from Beowulf to Wordsworth..... 5 Cr.
65. LITERARY BACKGROUNDS. Continuation of Lit. 64, Wordsworth to the present..... 5 Cr.
66. INTRODUCTION TO POETRY. Discussion of poetic theory; emphasis placed on appreciation of poetry; selected readings.. 5 Cr.
73. INTRODUCTION TO MODERN LITERATURE. Survey course in basic readings in modern novel, drama, and essay..... 5 Cr.
75. INTRODUCTION TO LITERATURE. A study of conventions and techniques in the novel, short story, drama and poetry... 5 Cr.
77. CREATIVE WRITING. An advanced course in the various forms of creative expression in exposition and narration..... 5 Cr.
78. CREATIVE WRITING. A continuation of Creative Writing 77.. 5 Cr.
103. LITERARY CRITICISM. An historical study of the great critics 5 Cr.
104. CONTEMPORARY LITERATURE. A reading course in the modern drama and novel of France and Germany..... 5 Cr.
106. CONTEMPORARY LITERATURE. Modern novel and drama of England and Ireland..... 5 Cr.
107. HISTORY OF THE ENGLISH LANGUAGE. A study of the historical development of modern English in vocabulary, syntax, morphology, pronunciation, spelling and semantics.... 5 Cr.
144. EIGHTEENTH CENTURY LITERATURE. A reading course in the larger works which were not treated in the survey course. Emphasis will fall on the novelists and essayists..... 5 Cr.
151. MIDDLE ENGLISH. Gower, Piers Plowman, and the Canterbury Tales 5 Cr.
- 151b. MIDDLE ENGLISH LITERATURE. Troilus and Criseyde and some of Chaucer's more important minor poems..... 5 Cr.
153. RENAISSANCE LITERATURE. A reading course in Spenser and the English drama between 1550 and 1642..... 5 Cr.
161. AMERICAN LITERATURE. A survey course in the first half of American literature..... 5 Cr.
162. AMERICAN LITERATURE. A continuation of Lit. 161. Second half of survey course..... 5 Cr.
164. AMERICAN LITERATURE. A survey course of the entire field 5 Cr.

166. AMERICAN LITERATURE. A reading course in the Modern American novel 5 Cr.
167. SEVENTEENTH CENTURY LITERATURE. The poetry and prose of Milton..... 5 Cr.
168. SEVENTEENTH CENTURY LITERATURE. Restoration drama and the important longer works of other writers of the period 5 Cr.
170. SHAKESPEARE. Comedies and history plays written before 1601 5 Cr.
171. SHAKESPEARE. Tragedies, problem comedies and dramatic romances 5 Cr.
173. VICTORIAN POETRY AND PROSE..... 5 Cr.
174. LATE NINETEENTH CENTURY. Study of the larger important prose works of the major Victorians..... 5 Cr.
175. LATE NINETEENTH CENTURY. Victorian poetry..... 5 Cr.
176. VICTORIAN PERIOD, CATH. LIT. REVIVAL..... 5 Cr.
177. EARLY NINETEENTH CENTURY. A study of the poetry and prose of the romantic movement..... 5 Cr.
190. PHILOSOPHY OF LITERATURE. A study of the philosophical trends in Modern Literature..... 5 Cr.
197. WORLD LITERATURE. A reading course in the outstanding works in world literature from the beginning to modern times which are not contained in the listed courses in English, American or contemporary literature..... 5 Cr.

Graduate Courses

201. INTRODUCTION TO GRADUATE STUDY. Methodology..... 5 Cr.
203. LITERARY CRITICISM 5 Cr.
- 205, 206. CHAUCER 5 Cr.
207. RELIGIOUS LYRICS OF MIDDLE ENGLISH AND EARLY RENAISSANCE 5 Cr.
208. ENGLISH DRAMA—Non-Shakespearean—1550-1642 5 Cr.
211. SPENSER AND NON-DRAMATIC LITERATURE OF RENAISSANCE 5 Cr.
217. SHAKESPEARE (1590-1601). Comedies and History plays..... 5 Cr.
218. SHAKESPEARE (1601-1613). Tragedies, Problem Comedies and Romances 5 Cr.
221. MILTON 5 Cr.
222. NON-MILTONIC 17TH CENTURY LITERATURE..... 5 Cr.
224. AMERICAN LITERATURE. Poe, Hawthorne, Melville..... 5 Cr.
225. AMERICAN LITERATURE. Emerson, Thoreau, Whitman..... 5 Cr.
226. AMERICAN LITERATURE. Twain, Howells, Garland, Dickinson 5 Cr.
230. DEVELOPMENT OF THE ENGLISH LANGUAGE..... 5 Cr.
238. ROMANTIC PERIOD. Wordsworth and Coleridge..... 5 Cr.
239. ROMANTIC PERIOD. Keats, Shelley, Byron..... 5 Cr.
- 241-242. VICTORIAN LITERATURE 5 Cr.
243. VICTORIAN PERIOD, Cath. Lit. Revival..... 5 Cr.
- 244-245. EIGHTEENTH CENTURY LITERATURE..... 5 Cr.
247. ENGLISH NOVEL 5 Cr.

HISTORY (Hs)

Rev. Vincent M. Conway, S. J., Head

Undergraduate Major: 50 hours—1, 2, 50, 51 and 30 hours in upper division work.

Related Minor: to be selected from Groups I or II or Mt. in Group III, cf. p. 16.

Undergraduate Minor: 25 hours—select 15 hours from 1, 2, 50, 51, and 10 hours in upper division work.

1. HISTORY OF WESTERN CIVILIZATION TO THE 16TH CENTURY	5 Cr.
2. HISTORY OF WESTERN CIVILIZATION SINCE THE 16TH CENTURY	5 Cr.
50. THE AMERICAS: Colonial Period.....	5 Cr.
51. THE AMERICAS: Republican Period.....	5 Cr.
101. ANCIENT WORLD	5 Cr.
102. MEDIEVAL EUROPE	5 Cr.
159. THE RENAISSANCE AND THE REFORMATION.....	5 Cr.
161. EUROPE IN THE 17TH AND 18TH CENTURIES.....	5 Cr.
162. EUROPE, 1789-1830	5 Cr.
163. EUROPE, 1830-1870	5 Cr.
164. EUROPE, 1870-1914	5 Cr.
165. EUROPE SINCE 1914.....	5 Cr.
171. ENGLAND TO THE STUARTS.....	5 Cr.
172. ENGLAND SINCE THE STUARTS.....	5 Cr.
173. ENGLISH CONSTITUTIONAL HISTORY.....	5 Cr.
174. DIPLOMATIC HISTORY OF GREAT BRITAIN.....	5 Cr.
176. UNITED STATES, COLONIAL PERIOD.....	5 Cr.
177. UNITED STATES, 1789-1865.....	5 Cr.
178. UNITED STATES, 1865-1900.....	5 Cr.
179. UNITED STATES SINCE 1900.....	5 Cr.
181. UNITED STATES CONSTITUTIONAL HISTORY.....	5 Cr.
182. DIPLOMATIC HISTORY OF THE UNITED STATES.....	5 Cr.
184. HISTORY OF WESTERN UNITED STATES.....	5 Cr.
188. HISPANIC AMERICA	5 Cr.
191. BRITISH NORTH AMERICAN HISTORY.....	5 Cr.
199. HISTORIGRAPHY (not open to Freshmen and Sophomores) ..	5 Cr.
200. SEMINAR IN RESEARCH METHODS.....	5 Cr.
259-269. SEMINARS IN EUROPEAN HISTORY.....	5 Cr.
276-287. SEMINARS IN UNITED STATES HISTORY.....	5 Cr.

JOURNALISM (Jr.)

Rev. Robert J. Carmody, S. J., Advisor

Undergraduate Minor: 25 hours—1, 3, 102, 104, 130, 137 or 139, 141.

Recommended: Major in English, History, Political Science, Sociology.

1. INTRODUCTION. The background of journalism. Practice writing articles for The Spectator, student newspaper..... 3 Cr.
3. NEWSPAPER REPORTING AND CORRESPONDENCE. Study of the duties of the newspaper reporter and correspondent. The good news story and how it should be written. Practice in writing for The Spectator..... 5 Cr.

102. **EDITING AND COPY READING.** Proof reading, copy editing, condensation and re-writing. Practice work in writing headlines and editing..... 5 Cr.
104. **ADVERTISING.** Principles, functions, purposes, types of copy, good layout, psychology in advertising..... 5 Cr.
130. **CRITICAL WRITING.** The critic and the reviewer in the newspaper office 3 Cr.
137. **SPORT WRITING.** The sport story and the sport page..... 3 Cr.
139. **SOCIETY PAGE** 2 Cr.
141. **NEWSPAPER FEATURES.** Method of writing and importance of the feature writer..... 3 Cr.
145. **LAW OF THE PRESS.** The importance of law and legal procedure in relation to journalism and advertising. Libel, contracts, copyrights, Constitutional guarantees and restrictions on the freedom of the press..... 3 Cr.

LANGUAGES

Rev. Edward S. Flajole, S. J., Head

The completion of the course numbered 4, or its equivalent, is required of every candidate for a degree whose program of study includes a modern language. Students who have had two years of a modern language in high school are advised to register for course 3, rather than 1, in that same language. The Bachelor of Arts degree requires, in addition to a modern language, 15 hours of Latin exclusive of courses numbered 1 and 2.

FRENCH (Fr)

Rev. Julius La Motta, Advisor

Undergraduate Minor: 25 hours—at least 10 hours in upper division.

- 1, 2, 3. **ELEMENTARY.** This course is for beginners. No credit will be given for French 1 until 2 has been completed. Course 3 supposes 1 and 2..... 5 Cr.
- 4, 5, 6. **READING OF MODERN TEXTS:** exercises in reading of texts and periodical literature; conducted in French..... 4 Cr.
- 104, 105, 106. **STUDY OF THE SHORT STORY,** novels and essays by modern authors. Conducted in French..... 5 Cr.
111. **A SURVEY OF FRENCH LITERATURE.** A general survey of literature, with attention to the characteristics of the various periods. Lectures, critical study of representative texts, and reports on collateral reading..... 5 Cr.
- 141, 142, 143. **THE FRENCH DRAMA.** History of the French drama from its beginning. Lectures in French and assigned reading to be done outside of class. Pr. 6 and 104..... 5 Cr.
- 161, 162, 163. **EIGHTEENTH CENTURY LITERATURE**..... 5 Cr.
- 171, 172, 173. **SEVENTEENTH CENTURY LITERATURE.** Lectures in French, assigned reading and reports. The reports may be written in English but the discussions will be mostly in French.. 5 Cr.

GERMAN (Gr)

Rev. Edward S. Flajole, S. J., Advisor

Undergraduate Minor: 25 hours—at least 10 hours in upper division work.

- 1, 2, 3. **ELEMENTARY GERMAN.** A beginner's course consisting of grammar, pronunciation, exercise in easy themes and conversations, and readings from standard authors..... 5 Cr.
- 4, 5, 6. **INTERMEDIATE GERMAN.** Review of grammar and syntax with reading of selected texts and themes based on the reading 5 Cr.
105. **GERMAN PROSE WRITERS.** The study of novels or short stories by German prose writers: Novalis, Brentano, Eichendorff, Hauff, Stifter, Freytag, Heyse..... 5 Cr.
107. **GERMAN LITERATURE.** Reading from William Tell and Mary Stuart 3 Cr.
110. **IDIOMATIC GERMAN.** Class conducted in German conversation 3 Cr.
111. **A SURVEY OF GERMAN LITERATURE.** A general survey of German literature, with attention to the characteristics of the several periods. Lectures, a critical study of representative writings, and reports on collateral reading. Prerequisite: German courses 1 and 2, or four years of high school German..... 5 Cr.
114. **READINGS IN TECHNICAL GERMAN.** This course aims to familiarize the students with scientific treatises in their respective fields. The course may be taken by students in the College of Science..... 3 Cr.
- 115, 116, 117. **MED. GERMAN** 3 Cr.
151. **THE GERMAN CLASSICS.** A study of the works of Goethe, Schiller, and other important authors of the classical period. An elective course for juniors and seniors..... 5 Cr.
161. **MODERN GERMAN LITERATURE.** The rapid reading and the interpretation of nineteenth century short stories, novels, and dramas in German. The time allotted to the course is divided about equally among types of literature studied..... 5 Cr.

GREEK (Gr)

Rev. Julius La Motta, S. J., Advisor

Undergraduate Minor: 25 hours—at least 10 hours in upper division work.

1. **ELEMENTARY GREEK.** A beginner's course based on White's First Greek book. Reading from Xenophon's Anabasis..... 5 Cr.
50. **NEW TESTAMENT.** Selected readings with a thorough review of grammar and exercises based on the text read..... 5 Cr.
- 75, 76, 77. **HOMER.** Selected portions of the Iliad or Odyssey: Homeric Dialect; prosody; outline of Greek Epic Poetry..... 5 Cr.
- 140, 141. **DEMOSTHENES.** Two selected orations; history of the development of Greek oratory..... 5 Cr.
150. **PLATO.** The Apology and one of the Dialogues; a survey of contemporary Greek history..... 5 Cr.
- 160, 161, 162. **SOPHOCLES, AESCHYLUS.** One complete drama from each, with a study of the development of the Greek Drama..... 5 Cr.
- 180, 181, 182. **HERODOTUS.** Selections from Book I, VII, VIII, and IX; lectures on Greek historians and historical sources..... 5 Cr.

- 190, 191, 192. EURIPIDES AND ARISTOPHANES. A study of the Medea of Euripides, and the Frogs or the Clouds of Aristophanes..... 5 Cr.
- 194, 195, 196. ARISTOTLE. The Poetics of Aristotle, and his principles of literary criticism. Readings, discussions, and the writing of original essays 5 Cr.

LATIN (L4)

Rev. Julius La Motta, S. J., Advisor

Undergraduate Major: 45 hours—1, 13, 27, 28 and 25 hours in upper division work.

Related Minor: to be selected from Groups I or II or Mt. in Groups III, cf. p. 16.

Undergraduate Minor: 25 hours—1, 27, 28, and 10 hours in upper division work.

1. ELEMENTARY LATIN. An intensive study of syntax and selected readings for those beginning the study of Latin..... 5 Cr.
5. CICERO. Orations against Catiline with a review of syntax and practice in Latin prose composition..... 5 Cr.
11. LIVY. Books XXI and XXII are read for a study of Livy's style in contrast with that of the Ciceronian period. Discussion of Livy's reliability as an historian..... 5 Cr.
12. CICERO. Pro Milone is studied with special attention to its rhetorical qualities. Discussion and analysis of Cicero's argument and logic..... 5 Cr.
13. LATIN COMPOSITION. Arnold's Latin Prose Composition..... 5 Cr.
23. HORACE. A general introduction to the works of the poet, with a selected reading of examples from the Sermons, Epistulae, Epodi and Carmina respectively..... 5 Cr.
27. SURVEY OF LATIN LITERATURE. Andronicus, Naecius, Plautus, Ennius, Cato, Terence, Auctor, Herennium, Caesar, Cicero, Lucretius, Catullus..... 5 Cr.
28. SURVEY OF LATIN LITERATURE. Sallust, Livy, Vitruvius, Vergil, Horace, Elegist, Phaedrus, Seneca, Petronius, Statius, Martial, Tacitus, Pliny, Juvenal, Suetonius, Gaius.
101. ROMAN ORATORY. The excellence of Roman Oratory as illustrated in Cicero's Pro Milone, De Oratore, and Orator; Quintilian's Institutio Oratoria; St. Augustine's De Doctrina Christiana, Liber Quartus..... 5 Cr.
111. LIVY. A reading of Livy's First or Third Decade..... 5 Cr.
112. TACITUS. A special study of Tacitus as an historian and stylist with readings from the Agricola, Germania, and the Dialogus de Oratoribus..... 5 Cr.
113. ADVANCED LATIN COMPOSITION. Arnold's Latin Prose Composition or equivalent..... 5 Cr.
118. ROMAN HISTORIANS. The historical method and contributions of Roman historians with readings from Nepos, Caesar, Sallust, Livy, Tacitus, and Suetonius..... 5 Cr.
122. INTRODUCTION TO A STUDY OF THE LATIN FATHERS. Selections from Tertullian, Cyprian, Lactantius, Minucius, Felix, Jerome, Ambrose, Augustine, Gregory, and Bernard..... 5 Cr.
127. Cicero. A study of Cicero as an essayist. De Amicitia and De Senectute 5 Cr.

130. HORACE. Selected Odes and Epodes are studied for the lyric qualities of Latin poetry. The influence of Horace on modern poets is discussed..... 5 Cr.
131. HORACE. An intensive study of the Odes; meter and versification; sources and inspirations. Special attention to methods of teaching Horace..... 5 Cr.
132. VERGIL. A study of pastoral and didactic poetry. Eclogues, Georgics, and other early works of Vergil..... 5 Cr.
137. ELEGIAIC POETS. Catullus, Tibullus, Propertius, Ovid..... 5 Cr.
141. HORACE. Characteristics of the Roman satire. The importance of the *Ars Poetica* in the field of literary criticisms..... 5 Cr.
142. JUVENAL. Selections from the Satires of Juvenal..... 5 Cr.
161. ANCIENT ROMAN COMEDY. Characteristics of Roman Comedy. The Captivi of Plautus and the Phormio or Andria of Terence are read..... 5 Cr.

Graduate

228. SENECA. Political and social life under the Caesars. Stoicism and Christianity. *Epistulae Morales* and selections from the Moral Essays of Seneca..... 5 Cr.
271. CICERO. A study of the philosophy of Cicero as revealed in *Disputationes Tusculanae* and *Somnium Scipionis*..... 5 Cr.
272. CICERO. A study of the ethical principles of Cicero as illustrated in the *De Officiis*..... 5 Cr.
273. CICERO. A discussion of his philosophical writings in their relation to the Greco-Roman philosophical schools. The dialogue, *de Finibus Bonorum et Malorum*, will be analyzed..... 5 Cr.
281. POLITICAL AND SOCIAL INSTITUTIONS OF ATHENS AND ROME. Assigned readings in Latin, Greek, and English translation with lectures and discussion..... 5 Cr.
282. ROMAN PRIVATE LIFE. Letters of Cicero, Horace, Pliny, and Seneca, illustrating standards of Roman life. Effects of late Christian culture 5 Cr.
282. CLASSICAL ARCHAEOLOGY 5 Cr.
287. HISTORY OF CLASSICAL LITERATURE. A study of Greek and Latin literature for comparisons, contrasts and influence.... 5 Cr.

SPANISH (Sp)

Rev. Julius La Motta, S. J., Advisor

Undergraduate Minor: 25 hours—at least 10 hours in upper division work.

- 1, 2, 3. ELEMENTARY SPANISH 5 Cr.
- 4, 5, 6. INTERMEDIATE SPANISH 5 Cr.
7. ADVANCED SPANISH 5 Cr.
8. ADVANCED SPANISH 5 Cr.
9. CONVERSATIONAL COURSE 5 Cr.

101. SURVEY COURSE OF SPANISH CLASSICS.....	5 Cr.
110. NOVEL OF THE GOLDEN AGE.....	3 Cr.
120. SPANISH NOVEL OF THE 19th CENTURY.....	3 Cr.
130. THE EPIC, LYRIC, AND MYSTIC POETRY OF SPAIN.....	3 Cr.
140. DRAMA OF THE GOLDEN AGE.....	2 Cr.
150. MODERN SPANISH DRAMA.....	3 Cr.
160. COMMERCIAL SPANISH	3 Cr.
170. SPANISH-AMERICAN SURVEY	3 Cr.

MATHEMATICS (Mt)

Rev. Edmund B. McNulty, S. J., Head

Undergraduate Major: 40 hours—2, 3, 6, 101, 102, 103, 114, 115.

Related Minor: to be selected from Groups I, II, or III, cf. p. 16.

Undergraduate Minor: 25 hours—2, 3, 6, 101, 102.

1. SOLID GEOMETRY. Prerequisite, Plane Geometry.....	5 Cr.
2. COLLEGE ALGEBRA. Prerequisite, 1½ years High School Algebra	5 Cr.
3. PLANE TRIGONOMETRY	5 Cr.
4. SPHERICAL TRIGONOMETRY	5 Cr.
5. MATHEMATICS OF FINANCE	5 Cr.
6. PLANE ANALYTIC GEOMETRY	5 Cr.
7. ENGINEERING ALGEBRA. Prerequisite High School Algebra..	5 Cr.
8. ENGINEERING TRIGONOMETRY	5 Cr.
9-10. INTRODUCTION TO COLLEGE MATHEMATICS.....	5 Cr.
101. DIFFERENTIAL CALCULUS. Prerequisite Plane Analytic Geometry	5 Cr.
102. INTEGRAL CALCULUS. Prerequisite Differential Calculus.....	5 Cr.
103. INTEGRAL CALCULUS. Prerequisite Integral Calculus 102....	5 Cr.
107. THEORY OF EQUATIONS.....	5 Cr.
110. SOLID ANALYTIC GEOMETRY. Prerequisite, Plane Analytic Geometry	5 Cr.
114-115. DIFFERENTIAL EQUATIONS	5 Cr.
116. ADVANCED CALCULUS	5 Cr.
122. THEORY OF DETERMINANTS.....	5 Cr.
175. INTRODUCTION TO MATHEMATICAL THOUGHT.....	1 Cr.

MUSIC

Rev. Daniel J. Reidy, S. J., Faculty Director

Walter Aklin, Head

(Request Music Bulletin)

Courses are offered in the theory of music and the practice, both vocal and instrumental, either toward a degree in music or as cultural electives in a regular academic degree. It is recommended that every student take at least one course in music appreciation.

NURSING (N)

Rev. Gerald R. Beezer, S. J., Regent
 Nazleh E. Vizetelly, M. A., Director

1. HISTORY OF NURSING.....	3 Cr.
51. ELEMENTARY PHARMACY. Drugs and Solutions.....	2 Cr.
61. PHARMACOLOGY AND THERAPEUTICS.....	3 Cr.
120. PRINCIPLES OF ELEMENTARY NURSING I.....	3 Cr.
121. PRINCIPLES OF ELEMENTARY NURSING II.....	2 Cr.
122. INTRODUCTION TO MEDICAL SCIENCE.....	3 Cr.
124. PRINCIPLES OF GENERAL MEDICAL AND SURGICAL NURSING	5 Cr.
125. PRINCIPLES OF MEDICAL SPECIALTIES.....	5 Cr.
126. PRINCIPLES OF SURGICAL SPECIALTIES.....	5 Cr.
128. MEDICAL NURSING PRACTICE.....	3 Cr.
129. PRACTICE IN DIET THERAPY AND CENTRAL DRESSING ROOM	6 Cr.
130. COMMUNICABLE DISEASE NURSING.....	3 Cr.
132. SURGICAL NURSING PRACTICE.....	3 Cr.
133. PRACTICE IN THE OPERATING ROOM AND IN THE OUT-PATIENT DEPARTMENT	6 Cr.
136. ADVANCED MEDICAL AND SURGICAL PRACTICE.....	6 Cr.
137. INTRODUCTION TO PUBLIC HEALTH.....	2 Cr.
138. PROFESSIONAL ADJUSTMENTS II.....	3 Cr.
139. PRINCIPLES OF PEDIATRICS AND PEDIATRIC NURSING	5 Cr.
140. PEDIATRIC NURSING PRACTICE.....	6 Cr.
141. PRINCIPLES OF OBSTETRICS AND OBSTETRICAL NURSING	5 Cr.
142. OBSTETRICAL NURSING PRACTICE.....	6 Cr.
145. VISITING NURSE PRACTICE.....	5 Cr.
146. TUBERCULOSIS NURSING PRACTICE.....	3 Cr.
147. PRINCIPLES OF PSYCHIATRY AND PSYCHIATRIC NURSING	5 Cr.
148. PSYCHIATRIC NURSING PRACTICE.....	6 Cr.
156. PRINCIPLES OF WARD ADMINISTRATION AND CLINICAL TEACHING	5 Cr.
157. SENIOR PRACTICE	6 Cr.

NURSING EDUCATION (NE)

156. WARD ADMINISTRATION AND CLINICAL TEACHING.....	5 Cr.
150. PRINC. & METHODS OF TEACHING IN NURSING EDUCATION	5 Cr.
191. PRINCIPLES OF GUIDANCE IN SCHOOLS OF NURSING....	3 Cr.
152. PRINCIPLES AND METHODS OF SUPERVISION.....	5 Cr.
137. INTRODUCTION TO PUBLIC HEALTH NURSING.....	2 Cr.
167. PRINCIPLES OF PUBLIC HEALTH NURSING.....	3 Cr.
151A. ORGANIZATION AND ADMINISTRATION IN SCHOOLS OF NURSING, Part I.....	3 Cr.
151B. ORGANIZATION AND ADMIN. IN SCHOOLS OF NURSING, Part II	3 Cr.
192. CURRICULUM CONSTRUCTION IN SCHOOLS OF NURSING	5 Cr.

PHYSICAL EDUCATION (PE)

1. SWIMMING	1 Cr.
2, 3, 4. EURYTHMICS	1 Cr.
5. BADMINTON	1 Cr.
6. TENNIS	1 Cr.
7. INDOOR BASEBALL	1 Cr.
27. VOLLEY BALL	1 Cr.
28. BASKETBALL	1 Cr.

PHYSICS (Ph)

Rev. Paul P. Luger, S. J., Head

Undergraduate Minor: 25 hours—1, 2, 3, and 10 hours upper division work.

1, 2, 3. GENERAL PHYSICS. Required of all premedics. One hour lecture, two one-hour recitations, two two-hour laboratory periods each week.....	5 Cr.
1. MECHANICS. A study of the Fundamental Laws of Mechanics applied to the three states of matter; properties of matter; change of state.....	5 Cr.
2. FUNDAMENTALS OF HEAT, AND ELECTRICITY AND MAGNETISM	5 Cr.
3. SOUND, LIGHT, ELECTROMAGNETIC RADIATION, ELEMENTARY PARTICLES OF MATTER AND ENERGY.....	5 Cr.
10. A SURVEY OF PHYSICS. A presentation of the fundamental concepts and principles of Physics and their relation to the history and welfare of the human race.....	5 Cr.
54. ELEMENTARY PHOTOGRAPHY. The optical principles of different types of camera lenses; chemistry of films and their development; laboratory practice in the taking, developing, printing and mounting of pictures.....	3 Cr.
89, 90. GENERAL PHYSICS. Required of prospective nurses. Three hours lecture and recitations and two-hour laboratory periods per week	5 Cr.
89. MECHANICS, SOUND AND HEAT, with specific attention to the needs of nurses and homemakers.....	5 Cr.
90. A STUDY OF ELECTRICITY AND LIGHT.....	5 Cr.
95. HOUSEHOLD PHYSICS SCR.	
97, 98, 99. ENGINEERING PHYSICS. Required of all Engineering students, prerequisites: College Algebra and Trigonometry. Theory is supplemented with many practical problems.....	5 Cr.
97. MECHANICS AND HEAT.....	5 Cr.
98. ELECTRICITY AND MAGNETISM, AND SOUND.....	5 Cr.
99. LIGHT AND ELECTROMAGNETIC RADIATION.....	5 Cr.
100, 101. INTRODUCTION OF MODERN PHYSICS. The discoveries in the realm of Atomic Physics since about the year 1907, and changes in theory necessitated by these new developments. Prerequisites: Physics 3 or Physics 99. Autumn and Winter Quarters	3 Cr.
103. ELECTRONICS. Theory and laboratory demonstrations of devices employing electronic emission, vis. vacuum tubes including multi-electrode radio tubes, the photo-electric cell, the electron microscope, etc. Prerequisite: Physics 3, Physics 99 or equivalent.....	5 Cr.

- 105, 106. ADVANCED ELECTRICITY AND MAGNETISM. Prerequisites: Physics 2 or Physics 98. Autumn and Winter Quarters.... 4 Cr.
108. HISTORY OF PHYSICS from the beginning of scientific investigation to the present time..... 3 Cr.
110. SPECTROSCOPY. Prerequisite: Physics 3 or equivalent..... 5 Cr.
111. RADIO: Principles of electromagnetic radiation applied to modern radio circuits, construction and use of sending and receiving sets. Prerequisites: One year of Physics..... 3 Cr.
- 120, 121. THEORETICAL MECHANICS. Prerequisites: Physics 1 or Physics 97 3 Cr.
150. ADVANCED THEORY OF HEAT. Prerequisites: Physics 2 or Physics 97..... 3 Cr.
160. ADVANCED OPTICS. Prerequisites: Physics 3 or Physics 99.... 3 Cr.
170. ALTERNATING CURRENTS with numerous problems. Prerequisites: Physics 2 or Physics 98..... 5 Cr.
175. ILLUMINATION. Lectures, problems and assigned reading covering the elements of the production, measurement and utilization of light. Prerequisites: Physics 3 or Physics 99..... 5 Cr.
180. THERMODYNAMICS. Prerequisites: One year of Physics, either General Physics or Engineering Physics..... 5 Cr.

PHILOSOPHY (PI)

Rev. Henry H. Kohls, S. J., Head

Undergraduate Major: 41 hours—1, 100, 101, 106, 150, 151, 180, 182, 183, and Psy. 1.

Related Minor: to be selected from Groups I, II, III, cf. p. 16.

Undergraduate Minor: 26 hours—1, 100, 101, 150, 151, and Psy. 1.

- ✓ 1. LOGIC. Acts of the mind—laws of correct reasoning—the critical problems—criteria for valid evidence..... 5 Cr.
5. INTRODUCTION TO PHILOSOPHY..... 5 Cr.
- ✓ 100. PHILOSOPHY OF BEING. Nature of reality and its attributes. Philosophic-scientific investigations of contemporary theories on the constitution of matter. A methodical investigation of the fundamental aspects of reality; its primary divisions and attributes 3 Cr.
- ✓ 101. PHILOSOPHY OF GOD. The existence of an intelligent First Cause; the nature and attributes, the intelligence, the will and its relation to moral, physical evil, of the First Cause..... 3 Cr.
106. COSMOLOGY. Nature, properties of material bodies..... 2 Cr.
115. CONTEMPORARY PHILOSOPHY. Modern movements: idealism, mysticism, intuitionism, positivism, pragmatism, realism, mechanism, and vitalism..... 5 Cr.
120. NURSES ETHICS. General principles and their application..... 5 Cr.
- ✓ 150. INTRODUCTION TO ETHICS. General theory. Nature of moral acts. Distinction between good and evil. The moral law. Conscience, rights, man's three-fold duties, the family, society, private property..... 5 Cr.
151. ADVANCED ETHICS. Application of general theories to individual and social rights and duties, e.g., property, life, honor, marriage, unions, state, and international law. Arbitration 5 Cr.

180. GREEK PHILOSOPHY. A study of the development of Greek thought from the pro-Socratic era through Plato and Aristotle to the Greco-Oriental periods..... 3 Cr.
- ✓182. HISTORY OF PHILOSOPHY. Descartes to Kant, 1620-1780. A study of the intellectual movement from Descartes to Leibnitz and of English and French Empiricism..... 5 Cr.
- ✓183. HISTORY OF PHILOSOPHY. Kant and his successors. The Transcendental Idealism of Kant and the Monastic Idealism of his successors. Later varieties of the Empiricist theory. Pragmatism 5 Cr.
190. PHILOSOPHY OF RELIGION..... 3 Cr.
- 215-225. SEMINARS IN CONTEMPORARY PHILOSOPHY..... 3 Cr.
- 260-265. SEMINARS IN ETHICAL PRINCIPLES..... 5 Cr.

POLITICAL SCIENCE (Pls)

Rev. Vincent M. Conway, S. J., Head

Undergraduate Major: 50 hours—lower division work 10 hours including 1; upper division work 40 hours. Selection of upper division courses should be made under advice.

Related Minor: to be selected from Groups I or II, cf. p. 16.

Undergraduate Minor: 25 hours—~~1~~ and at least 10 hours in upper division work.

1. SURVEY OF POLITICS..... 5 Cr.
2. COMPARATIVE GOVERNMENT..... 5 Cr.
50. SOCIAL STATISTICS..... 5 Cr.
- ✓100. THEORY OF THE STATE..... 5 Cr.
101. HISTORY OF POLITICAL THOUGHT..... 5 Cr.
102. HISTORY OF AMERICAN POLITICAL THOUGHT..... 5 Cr.
- ✓110. ENGLISH CONSTITUTION 5 Cr.
(Pre-requisites Hist. 171, 172 or permission of instructor)
111. UNITED STATES CONSTITUTION..... 5 Cr.
120. NATIONAL GOVERNMENT AND ADMINISTRATION..... 5 Cr.
121. STATE GOVERNMENT AND ADMINISTRATION..... 5 Cr.
122. LOCAL GOVERNMENT AND ADMINISTRATION..... 5 Cr.
- ✓123. PUBLIC PERSONNEL 5 Cr.
124. POLITICAL PARTIES AND ELECTIONS..... 5 Cr.
130. PUBLIC FINANCE AND TAXATION..... 5 Cr.
131. GOVERNMENT AND BUSINESS..... 5 Cr.
132. GOVERNMENT AND LABOR..... 5 Cr.
150. HISTORY OF INTERNATIONAL RELATIONS TO 1914..... 5 Cr.
151. HISTORY OF INTERNATIONAL RELATIONS SINCE 1914... 5 Cr.
152. THE CATHOLIC CHURCH AND INTERNATIONAL ORDER 5 Cr.
153. INTERNATIONAL ORGANIZATIONS 5 Cr.
154. ECONOMIC PROBLEMS OF INTERNATIONAL RELATIONS 5 Cr.
155. GOVERNMENT AND FOREIGN TRADE (Pre-requisite Political Science 154)..... 5 Cr.
160. UNITED STATES FOREIGN POLICY..... 5 Cr.
161. BRITISH FOREIGN POLICY..... 5 Cr.
(Pre-requisites History 171, 172, or permission of instructor)

PSYCHOLOGY (Psy)

Rev. James B. McGoldrick, S. J., Head

Undergraduate Minor: 25 hours.

1. **PSYCHOLOGY.** The cerebrospinal nervous system, nature, properties of sensation, imagination, emotion, habit, character. The human soul, its substantiality, spirituality, immortality, intelligence and freedom. Criticism of the theories of Ego advocated by Kant, Hume, Mill and James..... 5 Cr.
140. **SOCIAL PSYCHOLOGY** (cf. Sociology)..... 5 Cr.
160. **CONTEMPORARY SCHOOLS OF PSYCHOLOGY.** Evaluation and Contribution of Behaviorism, Psycho-analysis, Gestalt and other schools 3-5 Cr.
165. **CHARACTER EDUCATION** 3 Cr.
170. **OUTLINES OF PSYCHIATRY** 5 Cr.
172. **ADVANCED PSYCHIATRY**..... 3 Cr.
175. **PSYCHOLOGY OF THE ADOLESCENT**..... 5 Cr.
178. **CHILD PSYCHOLOGY** 5 Cr.
190. **PSYCHIATRY SEMINAR** 3 Cr.

RELIGION (Ri)

Rev. Francis Lindekugel, S. J., Head

102. **FUNDAMENTAL APOLOGETICS.** The Christian Revelation—The Church: Its Institution, Constitution and Teaching Office 3 Cr.
104. **THE CREATION.** Faith—Its Nature and Obligations—God and His Attributes—The Trinity—The Creation—The Spiritual World—Rule of Faith. Man and the Fall. The Nature of Original Sin—The Immaculate Conception—Nature and Origin of the Human Soul—Angels—The Four Last Things..... 2 Cr.
107. **GOD THE REDEEMER.** The Person and Nature of the Redeemer—the Work of Redemption. Grace. Its Nature and Origin—Actual, Habitual, and Sanctifying Grace..... 2 Cr.
110. **THE SUPERNATURAL LIFE IN MAN.** The Sacraments: matter, dispositions, requisite, intention of subject—Baptism, Confirmation, The Holy Eucharist, The Mass, Penance, Extreme Unction, Holy Orders and Matrimony..... 2 Cr.
160. **THE MASS.** Dogma and Liturgy..... 3 Cr.
165. **MORAL GUIDANCE** 3 Cr.

SECRETARIAL STUDIES (Ss)

Miss Marie Yourglic, Head

- 16-17-18. **STENOGRAPHY.** The theory and application of shorthand..... 5 Cr.
- 20-21-22. **TYPING.** The theory and practice of typing..... 5 Cr.
101. **OFFICE MANAGEMENT** 5 Cr.
115. **BUSINESS ENGLISH** 5 Cr.
116. **OFFICE MACHINES** 5 Cr.

SOCIOLOGY (Sc)

Rev. Harold O. Small, S. J., Head

Undergraduate Major: 40 hours—1, 5, 34, 105 and 20 hours upper division.

Related Minor: to be selected from Gr. I, II or Mt. in Gr. III, cf. p. 16.

Undergraduate Minor: 25 hours—1, 5, and at least 10 hours in upper division work.

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|----------|---|-------|
| 1. | PRINCIPLES OF SOCIOLOGY. An introduction to the data and method of studying group life..... | 5 Cr. |
| 5. | MODERN SOCIAL PROBLEMS..... | 5 Cr. |
| 7. | INTRODUCTORY PRINCIPLES AND SOCIAL PROBLEMS.... | 5 Cr. |
| 34. | ELEMENTARY SOCIAL STATISTICS..... | 5 Cr. |
| 105. | SOCIAL STRUCTURE AND CHANGE. The organization of society—the principles and theories of change in society..... | 5 Cr. |
| 132. | METHODS IN THE SOCIAL SCIENCES..... | 3 Cr. |
| 134. | ADVANCED SOCIAL STATISTICS..... | 5 Cr. |
| 140. | SOCIAL PSYCHOLOGY: Personality in society—human conflict—mass behavior | 5 Cr. |
| 143. | SOCIOLOGY OF MARRIAGE..... | 2 Cr. |
| 156. | CRIMINOLOGY. Causes of crime. History and theories of punishment and reformation..... | 5 Cr. |
| 159. | JUVENILE DELINQUENCY. Casual and preventive factors.... | 5 Cr. |
| 160. | THE FAMILY. A brief history of the family with emphasis upon the social interaction in the American family..... | 5 Cr. |
| 163. | POPULATION TRENDS, POLICIES AND PROBLEMS..... | 5 Cr. |
| 166. | RACE AND NATIONALITY..... | 5 Cr. |
| 170. | MODERN SOCIAL REFORMS..... | 5 Cr. |
| 190. | SOCIO-ECONOMICS PROBLEMS | 5 Cr. |
| 202-206. | SOCIOLOGICAL THEORIES | 5 Cr. |
| 210. | SOCIOLOGY OF CUSTOM AND LAW..... | 5 Cr. |
| 215. | SEMINAR IN METHODS OF SOCIAL RESEARCH..... | 5 Cr. |
| 220. | ADVANCED POPULATION PROBLEMS..... | 5 Cr. |
| 247-249. | SOCIAL CRITICISM. Facts and theories are evaluated in the light of the Christian, American value system..... | 5 Cr. |
| 256. | THE PAROLE SYSTEM..... | 5 Cr. |
| 270. | SEMINAR IN MODERN SOCIAL REFORM MOVEMENTS.... | 5 Cr. |

NOTE: Sociology majors, under the direction of their adviser, may select from CF. 105; Ed. 175, 177; Psych. 170, 178.

SPEECH (Sph)

Rev. James A. Gilmore, S. J., Head

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|------|--------------------------|-------|
| 40. | SPEECH, ESSENTIALS | 5 Cr. |
| 100. | SPEECH, ADVANCED | 5 Cr. |
| 154. | RADIO SPEECH | 3 Cr. |
| 162. | SPEECH PATHOLOGY | 3 Cr. |

GRADUATES OF 1946

BACHELOR OF ARTS

Fritsch, Roberta Kathryn	Peterson, Charlotte June	Travers, Patricia Ann
Keppinger, Cordelia Marie	Swarva, Nancy Cecilia	

BACHELOR OF SCIENCE

Bentler, Beatrice (Sr. Mary Albertine)	Lyons, Margaret Mary	Torresani, Charles L.
Cloud, Edwin Brennan	Morrisson, Jack Alfred	Truckey, Robert Bernard
Jasper, Richard Paul	Sonneland, Arthur	Vogeler, Otto Arthur
	Malcom, Jr.	

BACHELOR OF SOCIAL SCIENCE

Blake, George C.	Pettinger, Thomas Joseph	Terry, Edward M.
Eisen, Patricia Ann	Robison, Vernon Victor	Wiegand, Margaret
Hanley, Cathleen	Ryan, Barbara Ann	Elizabeth
Hayden, Lucille Anne	Stose, Rosemary Acheson	Zech, Raymond Ralph
Lewis, Rose Clara	Sullivan, Johanna Patricia	Wyman, Harold A.
Parker, Lillie Mae	Tangney, Jenne Gertrude	

BACHELOR OF SCIENCE IN SECRETARIAL STUDIES

Duggan, Mary Patricia	McDonald, Mary Ellen	Regimbal, Phyllis
Gavin, Nancy Carroll	(Sr. Mary Ellen)	

BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY

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Flohr, Kathryn Mary	Peerenboom, Jean Marie	Wentworth, Nathalie
McLean, Gertrude S.	Pinneo, Carol Anita	Genett

BACHELOR OF SCIENCE IN NURSING EDUCATION

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	(Sr. M. St. Agnes)	

BACHELOR OF SCIENCE IN NURSING

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Bensussen, Bertha	(Sr. Joan Frances)	O'Brien, Kathleen
Bishop, Marguerite Mary	Dockery, Margaret Louise	Margaret
Bourdon, Margaret Mineau	Dumont, Dorothy Alice	O'Day, Helen Marie
Briggs, Lorraine	Esser, Doris Mae	O'Leary, Margaret Frances
Evangeline	Guinn, Margaret Mary	Riley, Phyllis Maureen
Bywater, Elizabeth Louise	Kirk, Adlarose Hildred	Schneider, Dorothy Ann
Brennan, Eleanora	Leas, Lila Jean	Seibold, Claire Eleanor
(Sr. M. Immaculata)	Liljigreen, Eleanor Mary	Shaffer, Gretchen Rosalee
Caldwell, Katherine Lola	McCaskey, Jo Ann	Simicich, Virginia Mary
Cosgrove, Carolyn Rose	Malloy, Mary Elizabeth	Strauss, Eva Babette
d'Aubuchon, Mary Adaire	Morrison, Kathleen Joan	Zorotovich, Anita

MASTER OF ARTS

Boutin, Hilda Thelma (Sr. Mary Velma) History	Higgins, Pauline (Sr. Louis of the Blessed Sacrament) Philosophy	Terence Maureen) English
Ford, Catherine (Sr. Consuela Maria) History	Reilly, Mary Patricia (Sr.	

MASTER OF SCIENCE

Mohr, Cecilia C. (Sr. M. Febronia) Chemistry
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INDEX

- Absence from class, 17
 Academic Calendar, 4
 Accreditation, 13
 Administration: officers, 5; procedure, 15
 Admission: high school graduate, 13; war emergency, entrance examinations, college transfer, adult special, 14; foreign, auditor, 14
 Aim of Jesuit education, 12
 Aviation: ground school, 45
 Awards, 20
 Bequest form, 20
 Biology: degree, 26; major, minor, courses, 48
 Chemistry: degree, 27; major, minor, courses, 49
 Commerce and Finance: degree, 31; major, minor, courses, 49
 Committees of faculty, 5
 Courses of Instruction, 48
 Dietetics: degree, 44; courses, 50
 Dismissal, honorable, 18
 Education, 33; degree, 24, 28; major, minor, courses, 51; three-year secondary certificate, 33; six-year standard secondary certificate, 35; high school principal's credentials, 35; nursing, 42
 Electives, 16
 Engineering, 36; aeronautical, 36; chemical, 38; civil, 38; electrical, 39; mechanical, 40; courses, 52
 English: degree, 24, 28; major, minor, courses, 59; graduate, 47
 Examinations: mid-quarter, quarter, special, 16; comprehensive in philosophy and religion, 18; Master's degree, 46, 47
 Expenses: tuition, fees, 22
 Faculty, 6
 Fees, 22
 Grade points: definition, average, probation, 17; graduation, 18
 Graduate School: admission, requirements for master's degree, 46
 Graduation: application, requirements, 18; honors, 18
 History: degree, 24, 27; major, minor, courses, 61; graduate, 47
 History of the college, 12
 Incompletes, 17
 Journalism: minor, courses, 61
 Languages, 62; French, 62; German, 63; Greek, 63; Latin, 64; Spanish, 65
 Location of the college, 12
 Major and minor: definition, groups, grade point, 17
 Marking System, 16
 Master's Degree, 46
 Mathematics: degree, 24, 27, 28; major, minor, courses, 66
 Medical Technology: degree, 44
 Military Hospital, 50th General, 11
 Music, 66
 Night School, 45
 Nursing: degree, 42; affiliated schools, application, graduate nurses, U. S. Cadet Corps, 43; courses, 67
 Organizations, 20
 Philosophy: degree, 24, 29; major, minor, courses, 69
 Physical education: courses, 68
 Physics: minor, courses, 68
 Political Science: degree, 24, 28; major, minor, courses, 70
 Pre-dental, 30
 Pre-legal, 30
 Pre-medical, 31
 Probation, 17
 Programs of study, 24; College of Arts and Sciences, 24; School of Education, 33; School of Engineering, 36; School of Nursing, 42; The Graduate School, 46
 Quarter hour, 15
 Religion: requirements, 18; courses, 71
 Repetition of courses, 17
 Residence, out-of-town students, senior year for degree, 18
 Retreat, 18
 Scholarships, 19
 Secretarial studies: degree, 29; courses, 71
 Sociology, degree, 24, 28; major, minor, courses, 72
 Speech: courses, 72
 Summer Session, 45
 Thesis: Master's degree, 46
 Tuition, 22
 Withdrawal from classes, 15; financial refund, 22

THE NATIONAL JESUIT EDUCATIONAL ASSOCIATION

COLLEGES AND UNIVERSITIES

ALABAMA—Spring Hill College, Spring Hill.

CALIFORNIA—Loyola University of Los Angeles, Los Angeles;
Santa Clara University, Santa Clara;
University of San Francisco, San Francisco.

COLORADO—Regis College, Denver.

DISTRICT OF COLUMBIA—Georgetown University, Washington.

ILLINOIS—Loyola University, Chicago

LOUISIANA—Loyola University, New Orleans.

MARYLAND—Loyola College, Baltimore.

MASSACHUSETTS—Boston College, Boston;
Holy Cross College, Worcester.

MICHIGAN—University of Detroit, Detroit.

MISSOURI—Rockhurst College, Kansas City;
Saint Louis University, St. Louis.

NEBRASKA—The Creighton University, Omaha.

NEW JERSEY—St. Peter's College, Jersey City.

NEW YORK—Canisius College, Buffalo;
Fordham University, New York City.

OHIO—John Carroll University, Cleveland;
The Xavier University, Cincinnati.

PENNSYLVANIA—St. Joseph's College, Philadelphia.
University of Scranton, Scranton.

WASHINGTON—Gonzaga University, Spokane;
SEATTLE COLLEGE, Seattle.

WISCONSIN—Marquette University, Milwaukee.

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199

SEATTLE COLLEGE

Seattle 22, Washington

1946-1947

OPENING DATES

SPRING QUARTER..... March 17, 1947

SUMMER QUARTER..... June 16, 1947

FALL QUARTER..... October 1, 1947

WINTER QUARTER..... January 5, 1948

BULLETIN OF INFORMATION

SEATTLE COLLEGE

Department of Music

1946-1947

SEATTLE COLLEGE

900 Broadway

Seattle 22, Washington

DEPARTMENT OF MUSIC

ADMINISTRATIVE OFFICERS

Very Rev. Harold O. Small, S.J., Ph. D.	President
Rev. Anthony B. Corrigan, S.J., M.A.	Dean of Studies
Rev. Daniel J. Reidy, S.J., Ph. D.	Faculty Director
Mr. Walter Aklin, B. of Music	Head of Department

FACULTY

Piano	Walter Aklin, B. Music
Violin	Francis Armstrong
Voice	Gustave Stern, Ella Boardman
Organ	Joseph H. Greener, M. Music, William Moeller
Violincello	Iris Canfield, B.A.
Trumpet	Henry Cleveland

GENERAL INFORMATION

The Music curriculum is specially designed to meet the requirements of a liberal arts education. More intensive courses may be taken by the student who desires to make music his profession.

ADMISSION

Admission requirements to the School of Music are the same as for the College of Liberal Arts.

DEGREES

Music students may be candidates for a B. Music degree or a B.A. degree with a major in music.

A candidate for the degree of Bachelor of Music must complete the following hours of work:

Music: theoretic and applied	120 quarter hours
Academic subjects	57 quarter hours
Free electives	15 quarter hours

For a Bachelor of Music degree a student may major in Vocal or Instrumental music, Music Composition, or Music Education. Students majoring in Vocal or Instrumental music are required to have 36 credits in applied music. The other curricula require 18 credits.

Bachelor of Arts or Bachelor of Philosophy with a major in music. Minimum Requirements in Music:

<i>Subjects</i>	<i>Credits</i>
Music Fundamentals and Harmony	15
Music Literature and History	15
Vocal or Instrumental Music	12
Sight-singing	3
Choral Literature	3
Ensemble	8

For the minimum requirements in Academic subjects to obtain the degree Bachelor of Arts or Bachelor of Philosophy with a major in Music, consult the College Bulletin.

GRADUATE STUDY

General requirements as stated in the College Bulletin. A candidate for a graduate degree in Music must have completed work which in general corresponds to a Bachelor of Music degree.

In Vocal or Instrumental Music a student must have 30 undergraduate credits in one branch before enrolling for graduate work.

To earn a Master's Degree, the student must complete 24 additional credits in the major field and 12 in the minor field besides the thesis or recital.

ORGANIZATIONS AND ACTIVITIES

COLLEGE CHORUS. Meets twice a week. It is open to any College student interested in group singing, although an audition is required for admission. The chorus in the various operatic productions is chosen from this group. One credit per quarter.

COLLEGE ORCHESTRA. Meets twice a week. Special stress is placed on the study of Chamber Music and is open to any College student with musical experience. This group supplies the accompaniment for the operatic productions. One credit per quarter.

COLLEGE OPERA GUILD. Membership in this group is open to any College student possessing a good voice or theatrical experience and interested in musical productions. Two operatic selections will be presented each year giving the participants the invaluable experience of singing and acting before an audience.

MU SIGMA. A music honorary open to music majors with high scholastic standing who manifest special interest in things musical. Membership is limited to 15, and admission is obtained by invitation during the Spring quarter each year.

DOUBLE QUARTET. Composed of 4 men and 4 women singers gifted with unusually fine voices. This group supplies entertainment at College functions and presents request programs at the invitation of civic organizations. To insure singers of special talent, the College offers tuition scholarships to the 8 members who win these positions.

FEES

Voice or Instrumental Music, one-half hour lesson per week	\$25.00 per quarter
Music Theory, if taken privately, one half-hour lesson per week	\$25.00 per quarter
Piano practice room, one hour a day	\$ 5.00 per quarter
Practice room without piano, one hour a day	\$ 2.00 per quarter
Organ practice, one hour a day	\$20.00 per quarter

All music fees must be paid in advance.

COURSES

The various branches of vocal and instrumental music are designated by capital letters immediately following the course number.

A-Piano; B-Violin; C-Voice; D-Violoncello; E-Organ; F-Wind Instruments

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| 1, 2, 3. | ELEMENTARY VOCAL OR INSTRUMENTAL MUSIC. 2 or 3 credits. |
| 4. | INTRODUCTORY SIGHT-SINGING. 3 credits. |
| 6, 7, 8. | ELEMENTARY VOCAL OR INSTRUMENTAL MUSIC. 2 or 3 credits. |
| 10, 11, 12. | COLLEGE CHORUS. 1 credit. |
| 31, 32, 35. | COLLEGE ORCHESTRA. 1 credit. |

- 40, 42. ELEMENTARY ORCHESTRAL INSTRUMENTS. 3 credits.
- 43, 44, 45. COLLEGE CHORUS. 1 credit.
46. MUSIC FUNDAMENTALS AND ELEMENTARY HARMONY. This course includes the study and use of primary harmonies. 5 credits.
- 48, 49, 50. VOCAL OR INSTRUMENTAL MUSIC. First year for voice or instrumental majors. 2 or 3 credits.
52. KEYBOARD HARMONY. Transposition, modulation, and harmonization at the keyboard of figured and unfigured basses and melodies. 3 credits.
53. INTERMEDIATE HARMONY. This course covers dominant seventh and ninth chords and secondary harmonies. 5 credits.
54. ADVANCED SIGHT-SINGING. 3 credits.
- 55, 56, 57. COLLEGE ORCHESTRA. 1 credit.
- 65, 66, 67. CHORAL ENSEMBLE. 1 credit.
- 68, 69, 70. VOCAL AND INSTRUMENTAL MUSIC. Second year for voice or instrumental majors. 2 or 3 credits.
72. INTRODUCTION TO MUSIC LITERATURE AND HISTORY. Study of style and historical background of standard concert repertoire, with emphasis on current programs. Covers pre-classical and classical periods. (Palestrina, Bach, Mozart, Beethoven, etc.) 3 credits.
73. MUSIC LITERATURE AND HISTORY. Romantic period. (Schumann, Chopin, Liszt, Tchaikowsky, etc.) 3 credits.
74. MUSIC LITERATURE AND HISTORY. Impressionism and Modernism. (Debussy, Ravel, Richard Strauss, etc.) 3 credits.
75. STUDY OF THE GREAT OPERAS. Classical period. (Gluck, Mozart, Beethoven, etc.) 2 credits.
76. STUDY OF THE GREAT OPERAS. Romantic period. (Music dramas by Wagner and operas by Verdi, Bizet, Puccini, etc.) 2 credits.
77. STUDY OF THE GREAT OPERAS. Impressionistic and modernistic. (Debussy, Richard Strauss, Gershwin, etc.) 2 credits.
- 82, 83, 84. CHORAL ENSEMBLE. 1 credit.
- 85, 86, 87. COLLEGE ORCHESTRA. 1 credit.
101. ADVANCED HARMONY. Covers chromatic harmonies, modulations, suspensions, organ-point, etc. 5 credits.

109. COUNTERPOINT. Regulation of two or more concurrent melodies. 5 credits.
112. MUSICAL FORMS. Analysis and exercises in composition. 5 credits.
113. ELEMENTARY SCHOOL MUSIC. Application of educational principles to the teaching of music in the first six grades. 5 credits.
116. JUNIOR HIGH SCHOOL MUSIC. 5 credits.
117. ELEMENTARY COMPOSITION AND ARRANGING. Original work and arrangements for combination of voices or instruments. 5 credits.
- 118, 119, 120. VOCAL OR INSTRUMENTAL MUSIC. Third year for voice or instrumental majors. 2 or 3 credits.
127. CHORAL LITERATURE. A Cappella singing with emphasis upon skill in part-singing, style and interpretation. 3 credits.
128. CHAMBER MUSIC. Study of musical literature for string trios, quartets, and quintets. 3 credits.
- 130, 131, 132. COLLEGE ORCHESTRA. 1 credit.
136. TECHNIQUE OF CONDUCTING. Principles of conducting with practical experience in directing groups. 3 credits.
- 137, 138, 139. GREGORIAN CHANT. Historical survey of plainchant from the earliest period to the present day. 3 or 5 credits.
143. ORCHESTRATION. Principles of orchestral composition. 5 credits.
146. STUDY OF THE GREAT CONCERTOS. Including piano, violin, cello, and clarinet. 3 credits.
147. SONG AND CHORAL LITERATURE. Appreciation and history. 2 credits.
148. TONE POEMS OF BERLIOZ, LISZT, STRAUSS. 3 credits.
149. LATE MUSIC DRAMAS OF WAGNER. 2 credits.
150. ANALYSIS OF COMPOSITION AND SCORE READING. 2 credits.
151. THE SYMPHONY AND ITS COMPOSERS. Study and analysis of symphonies. History and comparison of composer's styles, instrumentation, and orchestration. 3 credits.
153. MODERN ORCHESTRAL LITERATURE. 3 credits.
157. FREE COMPOSITION. Writing in the smaller forms for voices and instruments. 5 credits.

163. ADVANCED COUNTERPOINT. The choral prelude, invention and fugue. Analysis and composition. 5 credits.
- 168, 169, 170. VOCAL OR INSTRUMENTAL MUSIC. Fourth year for voice or instrumental majors. 2 or 3 credits.
175. PIANO PEDAGOGY. Methods and materials of piano pedagogy, and practice teaching. 3 or 5 credits.
176. VIOLIN METHODS. Methods and materials of violin pedagogy, practice teaching. 3 or 5 credits.
197. ADVANCED COMPOSITION. Original writing in the larger forms. 5 credits.

COURSES FOR GRADUATES

- 201, 202, 203. GRADUATE COMPOSITION. Credits to be arranged.
- 204, 205, 206. RESEARCH. Problems in music education or musicology. Credits to be arranged.
- 207 THESIS. Original contribution from student's field of research. Credits to be arranged.
- 218, 219, 220. GRADUATE VOCAL OR INSTRUMENTAL MUSIC. Credits to be arranged.
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MINIMUM REQUIREMENTS IN APPLIED MUSIC FOR THE BACHELOR OF MUSIC DEGREE, AS OUTLINED BY THE NATIONAL ASSOCIATION OF SCHOOLS OF MUSIC

Note—It is understood that the following requirements are not to be construed in any way as outlines of courses of study, but merely indicate the comparative degrees of advancement to be attained at the various stages of the courses.

PIANO REQUIREMENTS

A. Requirements for Entrance

To enter the four year degree course in piano the student should be grounded in correct touch and reliable technique. He should play all major and minor scales correctly in moderately rapid tempo, also broken chords in octave position in all keys and should have acquired systematic methods of practice.

He should have studied some of the standard etudes, such as Czerny, op. 299, Book 1; Heller, op. 47 and 46 (according to the individual needs of the pupil); Bach, Little Preludes; a few Bach two-part inventions and compositions corresponding in difficulty to—

Hayden, Sonata No. 11, G major No. 20 (Schirmer).

Mozart, Sonata C major No. 3, F major No. 13 (Schirmer).

Beethoven, Variations on Nel cor Piu, Sonata Op. 49, No. 1.

Schubert, Impromptu Op. 142, No. 2, etc.

B. End of Second Year

At the end of the second year the student should have acquired a technique sufficient to play scales and arpeggii in rapid tempo, to play scales in parallel and contrary motion, in thirds and sixths and in various rhythms. He should have acquired some octave technique and should have studied compositions of at least the following grades of difficulty.

Bach, some three-part Inventions.

Bach, at least two preludes and fugues from Well Tempered Clavichord.

Bach, dance forms from French suites and partitas.

Beethoven, sonatas or movements from sonatas such as Op. 2, No. 1; Op. 14, Nos. 1 and 2; Op. 10, Nos. 1 or 2; Op. 26, etc.

Haydn, Sonata E flat, No. 3 (Schirmer) Sonata D major.

Mozart, Sonatas Nos. 1, F major, or 16, A major (Schirmer ed.).

Mendelssohn, Songs Without Words—such as "Spring Song," "Hunting Song," etc.

Liszt, "Liebestraum," transcriptions such as "On Wings of Song," "Du Bist die Ruh."

Schubert, Impromptu B flat.

Chopin, Polonaise C sharp minor, Valse E minor, Nocturne Op. 9, No. 2, Nocturne F minor, Op. 55, No. 1, Nocturne B major, Op. 31, No. 1.

Schumann, Nocturne F major, Novelette F major, Fantasiestuecke, "Bird as a Prophet."

Some compositions by standard modern composers of corresponding difficulty.

C. End of Fourth Year

The candidate must have acquired the principles of tone production and velocity and their application to scales, arpeggii, chords, octaves and double notes. He must have a repertory comprising the principal classic, romantic and modern compositions which should include such works as:

Bach, Chromatic Fantasia and fugue, toccatas, organ transcription by Busoni, Tausig, Liszt, D'Albert.

Beethoven, later sonatas such as Op. 53, 57, and a concerto.

Brahms, Rhapsodie B minor, Sonata F minor.

Chopin, ballades, polonaises, fantasie, barcarolle, scherzi, etudes, preludes and a concerto.

Liszt, rhapsodies, Paganini Studies, transcriptions, a concerto.

Schumann, Sonata G minor, Faschings-schwank, Carneval, Concerto.

Compositions by standard American and foreign modern composers such as MacDowell, Grieg, Rubenstein, Moszkowski, Debussy, Ravel, Rachmaninoff and others.

Candidates must have had considerable experience in ensemble and should be capable sight readers.

VOICE REQUIREMENTS

A. Entrance Requirements

To enter the four year degree course in voice the student should be able to sing on pitch with correct phrasing and musical intelligence standard songs in good English (the simpler classics are recommended). He should also demonstrate his ability to read a simple song at sight and a knowledge of the rudiments of music. Some knowledge of piano is urgently recommended.

B. End of Second Year

At the end of the second year the student should have acquired a knowledge of breath control, principles of enunciation, and pronunciation as applied to singing, tone placement and the essentials of interpretation. He should demonstrate his ability to sing, major, minor, and chromatic scales, arpeggi, contrasting exercises for agility and for sustaining tone, and the classic vocal embellishments. He should demonstrate a knowledge of recitative, and the ability to sing one or more of the less exacting arias of opera and oratorio and several standard songs from memory. He should also have acquired knowledge of one language in addition to English.

C. End of Fourth Year

The candidate for graduation should demonstrate the ability to sing the more difficult arias of opera and oratorio in English and in two foreign languages, a knowledge of recitative in both the free and measured forms, knowledge of the general song literature and the ability to give a creditable recital.

The repertory for immediate use should consist of at least four operatic arias, four oratorio arias, twenty classic and twenty standard modern songs.

The candidate should have completed two years of ensemble singing; he must also have completed sufficient piano study to enable him to play accompaniments of average difficulty.

ORGAN REQUIREMENTS

A. Entrance Requirements

To enter the four year degree course in organ the student should have completed sufficient piano study to enable him to play some Bach inventions, Mozart sonatas, easier Beethoven sonatas, compositions by Mendelssohn, Grieg, Schubert, Schumann, etc.

B. End of Second Year

At the end of the second year the student should have acquired the ability to play the following compositions or others of similar grade:

Bach (Schirmer Edition) Vol. I, No. 12, Prelude.

Vol. II, No. 17, Fugue in G minor.

(Ditson Edition) Selections from the *Liturgical Year* Organ Chorales

Mendelssohn, Sonatas No. II, IV, V.

Guilmant, Sonata No. IV.

Hollins, Overtures C major—C minor.

Compositions for the modern organ by standard American and foreign composers.

He should also demonstrate ability in sight reading, in the accompaniment of the classic oratorios and masses, and in general service playing.

C. End of Fourth Year

The candidate for graduation should have acquired ability in transposition at sight, open score reading and improvisation. He should have a large repertory of organ literature of all schools, classic and modern, of the degree of difficulty indicated by the following:

Bach, (Schirmer Edition) Vol. IV, No. 4, Fantasia and Fugue, G minor.

Vol. IV, No. 7, Prelude and Fugue, B minor.

Vol. II, No. 12, Prelude and Fugue, D major.

Book V, Sonatas.

Franck, Chorales, Piece Heroique.

Widor, Symphony No. V.

Guilmant, Sonata D minor, No. 1.

Vierne, Symphony No. 1.

Compositions for modern organ or same grade of difficulty by standard American and foreign composers.

VIOLIN REQUIREMENTS

A. Entrance Requirements

To enter the four year degree course in violin the student should have an elementary knowledge of the pianoforte.

He should have the ability to perform etudes of the difficulty of the Kreutzer Etudes, Nos. 1 to 32, and works of the difficulty of the Viotti Concerto, No. 23, the de Beriot concerti, Nos. 7 and 9, and the Tartini G minor sonata.

B. End of Second Year

At the end of the second year the student should have acquired the ability to perform works of difficulty of the Viotti Concerto No. 22, the Spohr Concerto No. 2 and the easier Bach sonatas for violin and piano.

The student should also give evidence of his ability to read at sight compositions of moderate difficulty, and should demonstrate sufficient ability in ensemble to take part in the performance of easier string quartets and symphonic works. He should have acquired sufficient pianistic ability to play simple accompaniments.

C. End of Fourth Year

The candidate for graduation should show an adequate technical grounding in scales, arpeggi, bowing and phrasing and the ability to perform works of the difficulty of the Mendelssohn E minor concerto, the Bruch G minor or Spohr No. 8.

During the four year course the student should have had not less than two years practical orchestral experience and two years of ensemble. He should have studied the viola sufficiently to enable him to play viola in ensembles.

He should further demonstrate adequate ability in sight reading and should be able to sight-read simple piano accompaniments.